Candidate's Name: DR. VOLCHENKOV, DIMITRI Date: Monday, Februa	ry 19, 2024	
I. GENERAL INFORMATION		
CONTACT INFORMATION		
E-mail: <u>dimitri.volchenkov@ttu.edu</u> Web: <u>http://www.math.ttu.edu/~dvolchen</u>		
Texas Tech University, Department of Mathematics and Statistics, Room 244		
Phone: (806) 834-1920, Mobile: (806) 543-7872		
Home Address: 101 N Vale Ave. Lubbock, TX 79416		
EDUCATION & QUALIFICATIONS		
Qualified as Privatdozent, Theoretical & Mathematical Physics Bielefeld University, Germany	Oct 2010	
Habilitation ( <i>Doctor habilitatus</i> ), Theoretical & Mathematical Physics Bielefeld University, Germany	Oct 2010	
Qualified as a University Professor, Theoretical & Mathematical Physics Ministère De L'éducation Nationale, Paris, France N°08129188186	May 2008	
Qualified as a University Professor, Physics of Diluted & Optical Media Ministère De L'éducation Nationale, Paris, France (N°08130188186)	May 2008	
Habilitation ( <i>Doctor habilitatus</i> ), Theoretical & Mathematical Physics l'Universite Aix-Marseille, C.N.R.S. UMR-6207, Marseille, France	Feb 2007	
Ph.D., in "Physical and Mathematical Sciences", V.A. Fock Research Institute of Physics, Saint-Petersburg State University, Russia	May 1996	
Diploma Cum Laude, Theoretical and Mathematical Physics, Saint-Petersburg State University, Russia	May 1993	
Radiolocation Engineer, Saint-Petersburg State University, Russia.	May 1992	

### CURRENT ACADEMIC POSITION

Professor	Sep 2022 –
Department of Mathematics and Statistics	
Texas Tech University, Lubbock	
PRIOR ACADEMIC POSITIONS	
Associate Professor	Sep 2017 – Aug 2022
Department of Mathematics and Statistics	
Texas Tech University, Lubbock	
Professor	Sep 2016 – Sep 2017
1000 Talent Plan of China Program	
Sichuan University of Science and Engineering, Zigong, China	
Research Professor	2009 - 2016
Center of Excellence: Cognitive Interaction Technology	
Bielefeld University, Germany	
Volkswagen Research Fellow	2007-2008
Bielefeld-Bonn Stochastic Research Center	
Bielefeld University, Germany	
NATO/OTAN Research Fellow	2006-2007
Centre de Physique Théorique, CNRS UMR-6207	
Marseille, France	
Alexander von Humboldt Research Fellow	2006
Center of Interdisciplinary Research	
Bielefeld University, Germany	
Research Fellow	2003-2006
V.A. Fock Research Institute of Physics	2002 2000
Saint-Petersburg State University, Russia	
NATO/OTAN Research Fellow	2002 2002
Centre de Physique Théorique, CNRS UMR-6207	2002-2003
Marseille, France	

Alexander von Humboldt Research Fellow Center of Interdisciplinary Research, Bielefeld University, Germany	1999-2002
NATO/OTAN Research Fellow Centre de Physique Théorique, CNRS UMR-6207 Marseille, France	1998-1999
Visiting Assistant Professor Texas A&M University College Station, TX ,USA	1997-1998
Assistant Professor V.A. Fock Research Institute of Physics Saint-Petersburg State University, Russia	1996
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	
American Mathematical Society	Member since 2020
Alexander von Humboldt Alumni Society (Germany)	Member since 2000
RESEARCH AFFILIATION	
Department of Mathematics and Statistics, Texas Tech University	
II. TEACHING	
TEACHING AWARDS	
TTU SIAM professor of the year 2021/2022	2022
Department of Mathematics and Statistics, TTU	
Outstanding advisor/mentor award	2019
Department of Mathematics and Statistics, TTU	
PEDAGOGICAL ACCOMPLISHMENTS	
Honors college courses taught (TTU): Calculus III w. Applications - MATH 2450 H01	Fall 2018
New courses developed (TTU):	
Dr. Dimitri Volchenkov, TTU	3 CURRICULUM VITAE

MATH 5365 Computer Literacy and Programming II: Mathematical	Summer I 2023
Foundations of Data Science, Machine Learning and Artificial intelligen	ce Summer II 2023
	Fall2020,
	Fall2019,
	Spring 2018
MATH 4330 Mathematic Computing	Fall 2018
MATH 5399 Advanced Problems: Discrete Mathematics w. Applications	S Summer 2019
New courses developed (Sichuan Univ of Science and Engineering, C	China):
Mathematics of Data Science	Summer 2017
Nonlinear Dynamical Systems w. Applications	Fall 2016
New courses developed (Bielefeld University, Germany):	
ekVV 289994 Modern Mathematical Physics w. Applications	2013-2014
Real World Models: From Extreme Matter to Financial Markets	Summer 2013
International Graduate College	
Wicked Problems, Complexity and Wisdom	Summer 2013
International Graduate College	a i <b>a</b> ata
ekVV 289650 Random Walks over Networks and Databases	Spring 2013
ekVV 289973 Hyperbolic geometry of Complex Networks	Fall 2012
ekVV 289990 Stochastic Analysis of Complex Networks Stochastic and Real-World Models	Spring 2011 Summer 2006
International Graduate College	Summer 2000
New courses developed (University of Pedagogical Art, S Petersburg	
Advanced Problems in College Physics	Fall 2004
	Fall 2003
PROMOTING EDUCATION WORLDWIDE	
Public University Library Bought and Organized	
English Language Scientific Library	June 2016
Sichuan University of Science and Engineering, China	
Personal gift \$50,000 from the grant 1000 Talent Plan Program of China	L
SCHOLARSHIP OF TEACHING AND LEARNING	
Classroom Communication and Chalk Talk Workshop attended	March 2019
Communication Training Center, TTU	
RESEARCH MENTORING	
Chair of Doctoral Committees (Completed)	
Rathnayake, Kusal	Apr 2023
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DR. DIMITRI VOLCHENKOV, TTU	CURRICULUM VITAE

Department of Mathematics and Statistics, TTU Dissertation Title: Machine Learning Analysis of Human Decission making Committee members: Dimitri Volchenkov (chair), Ori Swed, Leif Ellingson	
Hettiarachchige Sithma Sineka Pinto Jayawardena Department of Mathematics and Statistics, TTU Dissertation Title: Statistical Learning of Political Conflict Dynamics Committee members: Dimitri Volchenkov (chair), Ori Swed, Leif Ellingson	Apr 2023
Zhuanzhuan Ma Department of Mathematics and Statistics, TTU	June 2022
Dissertation Title: "Sparse Bayesian Variable Selection in High Dimensional Regression and Applications of the Log-Logistic Distribution in Industrial Engineering" Committee Dimitri Volchenkov (chair), Min Wang (co-chair), Fangyuan Zhang, George Zhuo Tan Mark Sheridan (Dean Representative)	
Dassanayaka Mudiyanselage, Sachith Eranga Department of Mathematics and Statistics, TTU	May 2022
Dissertation Title: Artificial Intelligence Algorithms for Activity Pattern Detection in t	he
Information Operation Networks Committee members: Dimitri Volchenkov (chair), Ori Swed, Leif Ellingson, Akbar Sia (Dean's Representative)	mi-Namin
Veniamin Smirnov Department of Mathematics and Statistics, TTU	Sep 2021
Dissertation Title: Predictability and Uncertainty in Complex Systems Committee members: Dimitri Volchenkov (chair), Alexander Solynin, Dmitry Pavlov, A Siami-Namin (Dean Representative)	Akbar
Isuru Dilan Dassanayake	June 2021
Department of Mathematics and Statistics, TTU Dissertation Title: Exploring Social and Economic Predictors for US Government Elec Committee members: Dimitri Volchenkov (chair), Ori Swed, Kazuo Yamazaki, Chunn Leif Ellingson, Sanjaya Senadheera	
Thilini Vansana Mahanama	March 2021
Department of Mathematics and Statistics, TTU Dissertation Title: Risk Assessment and Financial Management of Natural Disasters a Committee members: Dimitri Volchenkov (chair), Svetlozar Rachev, Brent Lindquist	nd Crime
Sven Banisch	Sep 2011
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Department of Physics, Bielefeld University, Germany Dissertation Title: Markov Chain Aggregation for Agent–Based Models Committee members: Dimitri Volchenkov (chair), Philippe Blanchard, Gernot Akemann,

### **Chair of Doctoral Committees (In-Progress)**

Fahad MostafaApr 2024Department of Mathematics and Statistics, TTUDissertation Title: "Statistical Machine Learning for Biomedical Science"Committee members: Dr. Dimitri Volchenkov(Chair), Dr. Victoria Howle(Co-chair), Dr. Linda J.S.Allen(Co-chair), Dr. Alex Trindade(Member)

HettiaracIlandari Dewage, Indika Gihan GunawardanaApr 2024Department of Mathematics and Statistics, TTUDissertation Title:Committee members: Dimitri Volchenkov (chair), Fanguyang Zhang, Leif Ellingson

Rajapaksha Pathiranage Dona, Charu Sameera DevindiApr 2024Department of Mathematics and Statistics, TTUDissertation Title:Committee members: Dimitri Volchenkov (chair), Ori Swed, Leif Ellingson

### **Member of Doctoral Committees**

Zulfiqar Ali Khan, M.S October 2023 Department of Electrical and Computer Engineering, TTU Dissertation Title: "Novel Vulnerability Detection Techniques for Ethereum-based Smart Contracts"/ Committee members: Dr. Akbar Siami-Namin (Chair) Dr. Yu Zhuang, Dr. Susan A. Mengel, Dr. Tommy Dang, Dr. Dimitri Volchenkov (Dean's Representative), Dr. Mark A. Sheridan (Dean of the Graduate School)

Amir Kaffashnia, MS, Ph.D. Candidate in Physics,August 2023The Memorial University of Newfoundland Thesis "Brownian Motion in One-Dimensional Models:Scaling, Universality, and Dispersionless Transport"

Committee Members: Dr Mykhaylo Evstigneev (Chair), Dr Anand Yethiraj, Dr. Dimitri Volchenkov, Dr Kennedy, Jennifer, Dr Ivan Saika-Voivod, Dr Stefan Wallin, Dr James LeBlanc, Dr Daneshtalab, Noriko, Dr Ruby Barron (Dean Representative)

Yawei Cheng, M.S., Ph.D. Candidate in Mathematics, June 2023 Department of Mathematics & Statistics, Texas Tech University Dissertation Title: "Latent Profile and Transactional Analyses for Cohort Panel Data" Committee Members: Dr. Tom Lu (Chair), Dr. Jinbo He, Dr. Dimitri Volchenkov, Dr. Mark A. Sheridan (Dean of the Graduate School)

Huyen Nguyen, Ph.D. Candidate in Computer Science, June 2023 Department of Electrical and Computer Engineering, Texas Tech University Dissertation Title: "Interactive Visualization and Event Detection in Time-series Data" Committee Members: Dr. Tommy Dang (Chair), Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Dimitri Volchenkov

Andrea Arriet, M.S, B.S, Ph.D. Candidate in Computer Science, June 2023 Department of Electrical and Computer Engineering, Texas Tech University Dissertation Title: "Water Management Policies for the Energy Sector for North America" Committee Members: Dr. Timothy Matis (Chair), Dr. Felipe Feijoo, Dr. Dongping Du, Dr. Hamidreza Validi, Dr. Dimitri Volchenkov

Luis Felipe Gutiérrez, M.S, B.S, Ph.D. Candidate in Computer Science March 2023 Department of Electrical and Computer Engineering, TTU Dissertation Title: "Enabling Context-Aware Natural Language Processing: From Dense Vector Representations to Contextual Features" Committee Members: Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Bashir I. Morshed, Dr. Tommy Dang, Dr. Dimitri Volchenkov

Faranak Abri, M.S, B.SJune 2022Department of Electrical and Computer Engineering, TTUDissertation Title: "Content Analysis and Modeling Interactions in Social Engineering Attacks"Committee Members: Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr.Bashir I. Morshed, Dr. Sumaiya Shomaji, Dr. Dimitri Volchenkov, Dr. Mark A. Sheridan (Dean of the Graduate School)

Datta, Prerit June 2022 Department of Electrical and Computer Engineering, TTU Dissertation Title: "Predicting Consequences through Cyberattack Descriptions" Committee Members: Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Bashir I. Morshed, Dr. Sumaiya Shomaji, Dr. Dimitri Volchenkov, Dr. Mark A. Sheridan (Dean of the Graduate School) Prasantha Bharathi D September 2021 Dissertation Title: "A Study On Fuzzy Hybrid Delay And Fractional Delay Differential Equations" Bharathiar University, Department Of Mathematics, Sri Ramakrishna Mission Vidyalaya, College Of Arts And Science Coimbatore - 641 046, Tamilnadu, India Committee members: Dr. T. Jayakumar, Dr. K. Sathiyanathan, Dimitri Volchenkov June 2021 Shuvalaxmi Dass Department of Electrical and Computer Engineering, TTU Dissertation Title: Evolutionary Reinforcement Learning based Moving Target Defense Framework to Generate Secure Configurations Committee Members: Akbar Siami-Namin (chair), Dimitri Volchenkov, Victor Sheng, Susan Mengel. June 2020 Moitrayee Chatterjee Department of Electrical and Computer Engineering, TTU Dissertation Title: A Framework For Evidence Theory Based Reinforcement Learning To **Enhance Decision Making** Committee Members: Akbar Siami-Namin (chair), Dimitri Volchenkov, Yong Chen, Tommy Dang, Mark Sheridan Jianjun Zheng Aug 2020 Department of Electrical and Computer Engineering, TTU Dissertation Title: Optimal Policy for Dynamically Changing System Configurations in Moving **Target Defense** Committee Members: Akbar Siami-Namin (chair), Dimitri Volchenkov, Yong Chen, Yuanlin Zhang, Mark Sheridan Sep 2020 Ahmed Belhad Department of Mathematics and Statistics, TTU Dissertation Title: New Estimators for the Co-risk Measures, CoVaRs Committee Members: Alex Trindade (chair), Leif Ellingson, Dimitri Volchenkov, Abdul Hamood Saeed Moradi Nov 2019 Department of Civil, Environmental and Construction Engineering, TTU Dissertation Title: RecovUS: An Agent-Based Model of Post-Disaster Recovery Committee Members: Ali Njat (chair), Dimitri Volchenkov, N. Cao, B. Ghosh, D. Miles, O. Swed Mehdi Jamali March 2019 Department of Civil, Environmental and Construction Engineering, TTU Dissertation Title: Human-Centering Approach Toward Post-Disaster Recovery Priorities Committee Members: Ali Njat (chair), Dimitri Volchenkov, D. Miles, O. Swed

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William M. Land Nov 2013 Department of Neurocognition and Action, Bielefeld University, Germany	3
Dissertation Title: From action representation to action execution. The links between cognitive and biomechanical levels of motor control Committee Members: Thomas Schack (chair), Dimitri Volchenkov, Bettina Blaezing, Helge Ritter	d
Lyudmilla ZhilyakovaDec 2013Trapeznikov's Institute of Control Sciences,	
The Russian Academy of Sciences, Moscow, Russia Dissertation Title: Resourse Networks and the Analysis of their Dynamics Committee Members: Lev Rapoport (chair), Michail Karavai), Dimitri Volchenkov, Yuri Legovich	
David Spee Nov 201	1
Department of Physics, Bielefeld University, Germany Dissertation Title: Spontaneous Symmetry Breaking Transport: From anomalous response to chiral separation Committee Members: Dietrich Bödeker (chair), Dimitri Volchenkov, Philippe Blanchard, Hans-	ıl
Jürgen Loesch, Jürgen Schnack	
Julio RodriguezJan 201Department of Physics, Bielefeld University, Germany	.1
Dissertation Title: Noise and Delays in Adaptive Interacting Oscillatory Systems Committee Members: Philippe Blanchard (chair), Dimitri Volchenkov, Jürgen Schnack, Max Hongler	
Elena Floriani Jan 2008 Aix-Marseille University,	8
Centre de Physique Théorique, CNRS UMR-6207, Marseille, France Dissertation Title: Etude des phénomènes d'intermittence, par des modèles déterministes et Stochastiques	
Committee Members: Ricardo Lima (chair), Sandro Vaienti, Valentin Afraimovich, Dimitri Volchenkov	
Michael Kompaniéts May 200 V.A. Fock Research Institute of Physics Saint-Petersburg State University, Russia	)5
Dissertation Title: Fully Developed Turbulence in bi-dimensional fluids Committee Members: Alexander Vasiliev (chair), Loran Adzhemyan, Mikhail Nalimov, Nikolai Antonov, Dimitri Volchenkov	

### **Chair of Master Committees**

Akash Deep Graduate School, TTU	Nov 2023
Interdisciplinary Studies, M.S., Portfolio Assessment Mathematics, Physics and Interdisciplinary Studies Program Portfolio Title: "Interdisciplinary Approaches in Mathematical Finance and Quantun Committee Members: Dimitri Volchenkov (chair), Lemon, Mike, Beth Thacker	n Physics"
Md Saiful Islam Saif Department of Mathematics and Statistics, TTU Thesis Title: "Imbalanced Machine Learning to Predict Heart Disease" Committee Members: Dimitri Volchenkov (chair), Fangyuan Zhang, Leif Ellingson	Nov 2022
Alam, Naima Department of Mathematics and Statistics, TTU Thesis Title: "Statistics of antenatal visits during pregnancy" Committee Members: Dimitri Volchenkov (chair), Fangyuan Zhang, Leif Ellingson	Nov 2022
Lawal, Ibrahim O. Department of Mathematics and Statistics, TTU Thesis Title: Credit Risk Prediction Using German Credit Dataset Committee Members: Dimitri Volchenkov (chair), Leif Ellingson	Apr 2021
Ali Samadian Zahraei Department of Mathematics and Statistics, TTU Thesis Title: Global Suicide Trends & Analysis by Age, Gender, and Country Committee Members: Dimitri Volchenkov (chair), Fangyuan Zhang	Apr 2021
Ilandari Dewage, Indika Gihan Gunawardana Department of Mathematics and Statistics, TTU Thesis Title: Heart Attack Analysis & Prediction Committee Members: Dimitri Volchenkov (chair), Fangyuan Zhang	Apr 2021
Brooke C Sanders Department of Mathematics and Statistics, TTU Thesis Title: Medical Insurance System in the US Committee Members: Dimitri Volchenkov (chair), Leif Ellingson	Oct 2019
Desi Corbin Department of Mathematics and Statistics, TTU Thesis Title: The Role of Prescription Drug Monitoring Programs in Addressing the U.S. Opioid Crisis Committee Members: Dimitri Volchenkov (chair), Leif Ellingson	Apr 2019
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Roham Sabzevari Department of Mathematics and Statistics, TTU Thesis Title: Constrained Principal Component Analysis Committee Members: Dimitri Volchenkov (chair), Leif Ellingson	Oct 2018
Ahmed Sabit Department of Mathematics and Statistics, TTU Thesis Title: Voting behavior of the swing counties in the U.S presiden Committee Members: Dimitri Volchenkov (chair), Leif Ellingson	Apr 2018 tial election
Holger Baumanns, Department of Physics, Bielefeld University, Germany Thesis Title: Die Interpretationen der Wellenfunktion in der Quantenm Committee Members: Dimitri Volchenkov (chair), Philippe Blanchard	Jan 2014 Jan 2014
Jonathan Helbach Department of Physics, Bielefeld University, Germany Thesis Title: Analyse von räumlichen Strukturen und deren Auswirkun menschliches Explorationsverhalten Committee Members: Dimitri Volchenkov (chair), Marko Tcherepanow	
Mehdi Khelif Aix-Marseille University, Centre de Physique Théorique, CNRS UMR- Thesis Title: Les graphes aléatoires invariants d'échelle : modèles réali Committee Members: Dimitri Volchenkov (chair), Cristel Chandre	
Jean René Dawin Department of Physics, Bielefeld University, Germany Thesis Title: Untersuchung Musikalischer Wuerfelspiele nach ihren Eigenschaften als Markovketten Committee Members: Dimitri Volchenkov (chair), Philippe Blanchard	Jan 2011
Joern Hendrik Steinhaus Department of Physics, Bielefeld University, Germany Thesis Title: Probabilistische Bootstrap Perkolation Modell (1,3,1/2) av Committee Members: Dimitri Volchenkov (chair), Philippe Blanchard,	
Sandra Sequeira Rodriguez Department of Physics, Bielefeld University, Germany Thesis Title: Networks of Coupled Chaotic Maps Committee Members: Dimitri Volchenkov (chair), Philippe Blanchard,	
Dr. Dimitri Volchenkov, TTU	11 CURRICULUM VITAE

# Recent Student Mentoring Activities (not listed above)

Member of the Mentor Network Participants Group Outreach and Engagement Mentorship Network Texas Tech University	Spring 2022 - Present
Roy, Sudharonjon R11812265 Department of Mathematics and Statistics, TTU Master Report	Spring 2024
Ilandari Dewage, Indika R11656557 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Spring 2024
Mostafa, G M Fahad Bin R11600164 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Spring 2024
Rajapaksha Pathiranage Dona, Charu Sameera Devindi R11651237 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Spring 2024
Salkhi Khasraghi, Gisou Land-Use Planning, Management, and Design Program, TTU Doctor's Dissertation	Spring 2024
Wickramasinghe Disanayakage, Gihani Vidumini Wickramasinghe Department of Mathematics and Statistics, TTU Individual Study Project: "Machine Learning with Phyton"	Spring 2024
Joseph Sebastian, Sachini Lakeesha Dinali Department of Mathematics and Statistics, TTU Individual Study Project: "Machine Learning with Phyton"	Spring 2024
Karunathilaka, Elagipitiye Liyannalage Nuwanthika Department of Mathematics and Statistics, TTU Individual Study Project: "Machine Learning with Phyton"	Spring 2024
Mostafa, G M Fahad Bin R11600164	Spring 2024
Dr. Dimitri Volchenkov, TTU	12 CURRICULUM VITAE

Department of Mathematics and Statistics, TTU Individual Research Project, "Machine Learning in Cancer Research"	
Ilandari Dewage, Indika R11656557 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Fall 2023
Mostafa, G M Fahad Bin R11600164 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Fall 2023
Rajapaksha Pathiranage Dona, Charu Sameera Devindi R11651237 Department of Mathematics and Statistics, TTU Doctor's Dissertation	Fall 2023
Salkhi Khasraghi, Gisou Land-Use Planning, Management, and Design Program, TTU Doctor's Dissertation	Fall 2023
Solodukhina, Anna Department of Mathematics and Statistics, TTU MATH 4000 Individual Study Project	Summer 2023
Munasinghe Arachchige, Kalana Kushan Department of Mathematics and Statistics, TTU MATH 7000 Individual Research Project	Summer 2023
Ilandari Dewage, Indika Gihan Gunawardana Department of Mathematics and Statistics, TTU STAT 7000 Individual Research Project	Spring 2023
Beeram, Sai Pavan Department of Mathematics and Statistics, TTU STAT 7000 Individual Research Project	Spring 2023
Rafi, Syed Ehsan Ar Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023

Munasinghe Arachchige, Kalana Kushan Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023
Deep, Akash Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023
Beeram, Sai Pavan Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023
Weerasekara, Thilini Piyumika Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023
Priyankara, Thambawita Maddumage Sajith Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project	Spring 2023
Chen, Austin R11774148 Honor Compass Program, Lubbock High School Department of Mathematics and Statistics, TTU MATH 4000 Selected Topics	Fall 2022
Rajapaksha Pathiranage Dona, Charu Sameera Devindi Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Drug Wars in Mexico. Driving Factors of Vi	Fall 2022
Ilandari Dewage, Indika Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Fall 2022
Fayyazishishavan, Ehsan Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Pariyar Damay, Dhruba Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022

Weerasekara, Thilini Piyumika Weerasekara Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Priyankara, Sajith Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Munasinghe Arachchige, Kushan Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Tuason, Tyler Jordan Magante Department of Mathematics and Statistics, TTU MATH 4000 Individual Study Project:	Summer 2022
Mahanama, Thisari Kanchana Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Saif, Md Saiful Islam Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project:	Summer 2022
Rathnayake, Kusal Chirantha Department of Mathematics and Statistics, TTU MATH 7000 Research Project:	Summer 2022
Pinto Jayawardena, Sithma Sineka Department of Mathematics and Statistics, TTU MATH 7000 Research Project:	Summer 2022
Rajapaksha Pathiranage Dona, Charu Sameera Devindi Department of Mathematics and Statistics, TTU MATH 7000 Research Project:	Summer 2022
Ilandari Dewage, Indika Department of Mathematics and Statistics, TTU MATH 7000 Research Project:	Summer 2022
Rajapaksha Pathiranage Dona, Charu Sameera Devindi	
Dr. Dimitri Volchenkov, TTU	15 CURRICULUM VITAE

Department of Mathematics and Statistics, TTU MATH 7000 Research Project: Drug Related Violence in Mexico	Spring 2022
Ilandari Dewage, Indika Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Customer Preferences Data from Texan Winer	Spring 2022 ies
Rathnayake, Kusal Chirantha Department of Mathematics and Statistics, TTU MATH 7000 Research Project: Human Decision Making	Spring 2022
Pinto Jayawardena, Sithma Sineka Department of Mathematics and Statistics, TTU MATH 7000 Research Project: Politically Motivated Violence as a Communication P	Spring 2022 rocess
Dassanayaka Mudiyanselage, Sachith Department of Mathematics and Statistics, TTU MATH 7000 Research Project: Automated Detection of Russian Network Operations	Spring 2022
Rathnayake, Kusal C. Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Epidemic Modelling	Fall 2021
Ilandari Dewage, Indika Gihan Gunawardana Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Python Programming	Fall 2021
Dassanayaka Mudiyanselage, Sachith Eranga Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Modeling Climate Change	Fall 2021
Charu Sameera Devindi Rajapaksha Pathiranage Dona Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Financial Mathematics of Commission-free tra	Fall 2021 ding
platforms Rathnayake, Kusal C. Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Mathematical Modeling of Genetic Drift	Summer 2021
Jayawardena, Sithma	Summer 2021
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Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Math. and Computational Sociology of Armed Conflict, Violence, and Elections

Das, Hrishikesh Department of Mathematics and Statistics, TTU	Summer 2021
MATH 5099 Individual Study Project: Math. and Computational Sociology of Arme Violence, and Elections	ed Conflict,
Dassanayaka Mudiyanselage, Sachith Eranga Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Disinformation Campaigns on Twitter	Summer 2021
Ilandari Dewage, Indika Gihan Gunawardana Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Heart Attack Analysis & Prediction Dataset	Summer 2021
Rajapaksha Pathiranage Dona, Charu Sameera Devindi Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Machine learning in Finance	Summer 2021
Kalanchige, Himali Sakunthala S. Department of Mathematics and Statistics, TTU Internship: Topics in Time Scale Analysis	Summer 2021
Smirnov, Veniamin Department of Mathematics and Statistics, TTU Internship: Predictable and Unpredictable Information in Symbolic Dynamics System	July 2021 ms
Lawal, Ibrahim O. Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Project in Python Programming	Spring 2021
Pinto Jayawardena, Hettiarachchige Sithma Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Modeling Climate Change	Spring 2021
Das, Hrishikesh Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Machine Learning and Deep Learning techni	Spring 2021 ques
Kalanchige, Himali Sakunthala	Spring 2021

Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Machine Learning and Deep Learning techniques

Wang, Hui Ju Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Phyton Programming Laboratory	Spring 2021
Rathnayake, Kusal C. Department of Mathematics and Statistics, TTU MATH 5099 Individual Study Project: Epidemic Modelling	Spring 2021
Nicholas Watson	2018-2019
Department of Mathematics and Statistics, TTU Mentorship in the framework of The South Plains Mathematics Fellows program for talented students from underrepresented, low-income families	academically
1 MATH 5099 Individual Study Projects CRNs: 36154	Summer 2020
1 MATH 5099 Individual Study Projects CRNs: 47578	Spring 2020
1 MATH 5099 Individual Study Projects CRNs: 38157	Fall 2019
4 MATH 5099 Individual Study Projects CRNs: 35060, 35621, 38142, 68949	Summer 2019
4 MATH 5099 Individual Study Projects CRNs: 47586, 47587, 57088, 57089	Spring 2019
<b>3</b> MATH 5099 Individual Study Projects CRNs: 29975, 29976,38160	Fall 2018
3 MATH 5099 Individual Study Projects CRNs: 38139, 38229, 69660	Summer 2018

### III. RESEARCH

Note: Current Research Grants

Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;
 Status: Awarded (A23-0139-001) Prime Account: 210697-E04208-200 (Active)
 Title: "Soldier Information Interface for Aviation Fleet Management Tool (FLEETSPACE
 Integration & Test)"
 PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU), Timothy Matis (IMMS TTU)
 Amount \$339,969.00.
 Duration: Feb 2023 – Jun 2024
 Candidate percentage of effort: 5.22%

2. Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;

Status: Awarded (A23-0086-001); Account Number: 210682-E04208-200;

Sponsor Award No: W911W6-17-3-0002 PO 435 CO000

Title: "Data Refinement and Reduction for Aviation Sustainment (DRRAS Phase II)"

PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU), Dongping Du

(IMMS TTU)

Amount \$524,971.00.

Duration: Aug 2022 – Apr 2024

Candidate percentage of effort: 30% Allocation of Credit: 25%

### PUBLICATIONS (referred)

#### THE DISCLOSURE OF THE AUTHORSHIP ORDER

Students-authors are highlighted in **bold**. Dr. Dimitri Volchenkov is indicated as the first author in those publications, for which he wrote the text in full, submitted the article to an academic or scholarly journal, responded to reviewer and editor comments, and revised the manuscripts according to the suggestions and comments of the reviewers. The authorship order in the publications may not correspond to those indicated above when the co-authors insisted on a special order of authorship, such as the alphabetical order, the order of academic seniority, the order of age seniority, and the gender sensitive order (women first). Considering collegiality an important aspect of collaboration and constructive cooperation, Dr. Dimitri Volchenkov never objected to the order of authorships requested by his coauthors.

### **Research Articles in Referred Journals**

Rating	Article	Contribution
4	73. Volchenkov, D. Multiplicative Renormalization of Stochastic Differential Equations for the Abelian Sandpile Model. <i>Dynamics</i> 2024, <b>4</b> , 40-56. <u>https://doi.org/10.3390/dynamics4010003</u>	100%
4	72. Salkhi Khasraghi, G.; Volchenkov, D.; Nejat, A.; Hernandez, R. University Campus as a Complex Pedestrian Dynamic Network: A Case Study of Walkability Patterns at Texas Tech University. <i>Mathematics</i> 2024, <b>12</b> , 140. <u>https://doi.org/10.3390/math12010140</u>	40%
4	71. Sachith E. Dassanayaka Mudiyanselage, Ori Swed, D. Volchenkov, "Keeping it Authentic: The Social Footprint of the Trolls' Network", Social Network Analysis and Mining, (2024) 14:38. DOI 10.1007/s13278-023-01161-1	33%

5	<ul> <li>70. Kolesnikov, A.; Volchenkov, D., "Beyond Polarization: Existential Choice in an Identity Crisis". <i>Proceedings of the Institute of Psychology of the Russian Academy of Sciences.</i> 3, 2(28) (June 2023), 43–61 (in Russian). Колесников, А. и Волченков, Д. 2023. «После поляризации: экзистенциальный выбор в условиях кризиса идентичности», <i>Ученые записки Института психологии PAH.</i> 3, 2(28) (июн. 2023), 43–61. <a href="http://scientific-letters.ru/index.php/SLIPRAS/article/view/69">http://scientific-letters.ru/index.php/SLIPRAS/article/view/69</a></li> </ul>	75%
5	69. Volchenkov. D., "Navigability, Walkability, and Perspicacity Associated with Canonical Ensembles of Walks in Finite Connected Undirected Graphs—Toward Information Graph Theory" <i>Information</i> 2023, <b>14</b> (6), 338; <u>https://doi.org/10.3390/info14060338</u> Available at <u>https://www.mdpi.com/2078-2489/14/6/338</u>	100%
4	68. <b>Thilini Vasana Mahanama</b> , Pushpi Paranamana, Dimitri Volchenkov, "Predicting the Severity of Tornado Events by Learning a Statistical Manifold for Tornado Property Losses", <i>Journal of Environmental Accounting and</i> <i>Management</i> <b>12</b> (2), 129-140 (2024).	33%
3	67. O. Swed, Sachith Eranga Dassanayaka, Volchenkov. D., "Mapping the Russian Internet Troll Network on Twitter using a Predictive Model", LHS Publishing <i>Journal of Vibration Testing and System Dynamics</i> 7(2) (2023) 113-128.	33%
5	66. <b>Rathnayake, K</b> .; Lebedev, A.; Volchenkov, D. Deciding on a Continuum of Equivalent Alternatives Engaging Uncertainty through Behavior Patterning. <i>Foundations</i> 2022, <b>2</b> , 1080-1100. <u>https://doi.org/10.3390/foundations2040071</u> ; available at <u>https://www.mdpi.com/2673-9321/2/4/71</u>	45%
4	65. Vladimir I. Kartsovnik, Dimitri Volchenkov, "Elastic Entropic Forces in Polymer Deformation" <i>Entropy</i> 2022, <b>24</b> (9), 1260; available at <u>https://www.mdpi.com/1099-4300/24/9/1260</u>	50%
	64. Volchenkov D. Psychology of survival in a global risk society: the hypothesis of emigration for endurance. Proceedings of the Institute of Psychology of the Russian Academy of Sciences. 2022. Vol. 2.No. 1.Pp.68-81. (in Russian). Волченков, Д. 2022. Психология выживания в глобальном обществе риска: гипотеза об эмиграции на выносливость. <i>Ученые записки Института психологии PAH</i> . 2, 1(3) (мар. 2022), 68–81.	
4	63. Volchenkov, D., Suh, C. Steve, "Statistical Mechanics of Long Walks in Dynamic Complex Networks. Statistical Arguments for Diversifying Selection",	75%

	<i>Dynamics</i> 2022, <b>2</b> (3), 252-269; MDPI Publishing, https://doi.org/10.3390/dynamics2030013 (registering DOI) https://www.mdpi.com/2673-8716/2/3/13	
5	62. Volchenkov. D., "Psychology of Survival in the Global Risk Society: Models of Time", Proceedings of the Institute of Psychology of Russian Academy of Sciences, vol 1 (2), pp. 51-68, 2021 <u>http://scientific- letters.ru/index.php/SLIPRAS/article/view/15</u> (in Russian). Волченков, Д. 2021. Психология выживания в глобальном обществе риска: модели времени. Ученые записки Института психологии РАН. 1, 2(2) (дек. 2021), 51–68.	100%
4	61. Volchenkov. D., "Assessing Pandemic Uncertainty on Conditions of Vaccination and Self-isolation", ISSN 1995-0802, Lobachevskii Journal of Mathematics, 2022, Vol. <b>43</b> , No. 2, pp. 490–500. Pleiades Publishing, Ltd., <u>https://www.springer.com/journal/12202</u> .	100%
5	<ul> <li>60. Kovalevsky, D.V.; Volchenkov, D.; Scheffran, J. Cities on the Coast and Patterns of Movement between Population Growth and Diffusion. <i>Entropy</i> 2021, 23, 1041. <u>https://doi.org/10.3390/e23081041</u></li> </ul>	33%
4	59. <b>Mahanama, T</b> ., Volchenkov. D., "Tornado Property Loss Scale: Up to \$8 Billion by 2025. (Classification, Dependence, and Prediction of Tornado Events in the U.S.)" <i>Journal of Environmental Accounting and Management</i> , <b>10</b> (2), 127-142, ISSN:2325-6192 (print) ISSN:2325-6206 (online) 2022.	50%
5	58. Volchenkov, D., Infinite Ergodic Walks in Finite Connected Undirected Graphs. <i>Entropy</i> 2021, <b>23</b> (2), 205. <u>https://doi.org/10.3390/e23020205</u> (2021)	100%
5	57. Smirnov, V., Ma, ZhuanZhuan., Volchenkov, D., "Extreme Events and Emergency Scales", <i>Communications in Nonlinear Science and Numerical Simulation</i> , Vol 90, November 2020, 105350	33%
5	56. Volchenkov, D., "Memories of the Future. Predictable and Unpredictable Information in Fractional Flipping a Biased Coin". <i>Entropy</i> , <b>21</b> (8), 807; https://doi.org/10.3390/e21080807 (2019).	100%
3	55. Shirvani A., Volchenkov, D., "A Regulated Market Under Sanctions. On Tail Dependence Between Oil, Gold, and Tehran Stock Exchange Index" <i>Journal of Vibration Testing and System Dynamics</i> , <b>3</b> (3), 297-311 (2019).	25%

3	54. Volchenkov, D., <b>Smirnov, V.</b> , "The City of Lubbock is Running Away. Integration and Isolation Patterns in the Wandering City", <i>Journal of Vibration Testing and System Dynamics</i> , <b>3</b> (2), 121-132 (2019)	50%
4	53. <b>Smirnov, V.</b> , Volchenkov, D., "Five Years of Phase Space Dynamics of the Standard & Poor's 500", <i>Applied Mathematics and Nonlinear Sciences</i> <b>4</b> (1) (2019) 203–216	50%
2	52. Ewa Banaszak, <b>Debopriyo Bangerjee</b> , <b>Robert Florkowski</b> , Tyll Krueger, <b>Sudipta Saha</b> , D. Volchenkov," Coding and modelling of daily dress – about scientists coming out of the closet". <i>Fabrica Societatis</i> . 2018, vol. <b>1</b> (1), 33-53 Instytut Socjologii Uniwersytetu Wrocławskiego, Wrocław, Poland	20%
3	51. M. Serva, <b>D. Vergni</b> , D. Volchenkov and A. Vulpiani "Recovering geography from a matrix of genetic distances", <i>European Physics Letters</i> <b>118</b> (2017) 48003.	25%
3	50. Atay, F., <b>Banisch S.</b> , Blanchard, Ph., Cessac, B., Olbrich, E., Volchenkov, D., "Perspectives on Multi-Level Dynamics", <i>Discontinuity, Nonlinearity, and</i> <i>Complexity</i> , Vol. <b>5</b> (3), 313–339 (2016).	15%
4	49. Volchenkov, D., Warglien M., <b>Cabigiosu, A.</b> , "We speak up the time, and time bespeaks us", <i>Discontinuity, Nonlinearity, and Complexity</i> , Vol. <b>5</b> (4) 375–395 (2016).	80%
4	48. Volchenkov, D., <b>B. Bläsing</b> , Th. Schack, "Spatio-Temporal Kinematic Decomposition of Movements", Engineering <b>6</b> , 385-398 (2014)	80%
3	47. Volchenkov, D., E. Banaszak, <b>K. Kocjan</b> , T. Krüger, "I dress like everyone, I dress like no other", Discontinuity, Nonlinearity, and Complexity <b>3</b> (2) (2014) 147–159	80%
4	46. Volchenkov, D., "Path integral distance for the automated data interpretation", Discontinuity, Nonlinearity, and Complexity $3(3)$ (2014) 255 - 279. The special issue on Mathematics of Multi-level Anticipatory Complex Systems (2014).	100%
3	45. Volchenkov, D., "Mathematics of Multi-Level Complex Systems", Discontinuity, Nonlinearity, and Complexity <b>3</b> (3), 223-225. (2014).	100%
3	44. Volchenkov, D., Jonathan Helbach, Marko Tscherepanow, Sina Kühnel," Treasure Hunting in Virtual Environments. Scaling Laws of Human Virtual	75%

Motions and Mathematical Models of Human Actions in Uncertainty", *Discontinuity, Nonlinearity and Complexity* **3**(1), 1-17 (2014)

4	43. Volchenkov, D., <b>Helbach J</b> ., Tscherepanow M, Kühnel S. ,"Exploration- exploitation Trade-off in a Treasure Hunting Game", <i>Electronic Notes in</i> <i>Theoretical Computer Science</i> , Vol. <b>299</b> , 25 December 2013, Pages 101–121, PII: S1571-0661(13)00080-7 (2013)	80%
3	42. Volchenkov, D., Helbach J., Tscherepanow M, Kühnel S. "Exploration– exploitation trade-off features a saltatory search behaviour". <i>Journal Royal</i> <i>Society Interface</i> <b>10</b> : 20130352 (2013).	70%
3	41. <b>Filippo Petroni</b> , Maurizio Serva, Volchenkov, D, Søren Wichmann, "From Indonesia to Madagascar: in search of the origins of the Malagasy language." <i>Indian Ocean Review of Science and Technology</i> ISSN 2312-1874, Published <i>by Institut Supérieur Polytechnique de Madagascar</i> (ISPM), Article 1/2013, 1 -13 (2013)	25%
3	40. Volchenkov, D., "Markov Chain Scaffolding of Real World Data", <i>Discontinuity, Nonlinearity, and Complexity</i> <b>2</b> (3) 289–299 (2013)  DOI: 10.5890/DNC.2013.08.005.	100%
3	39. Volchenkov, D., "Tsunami waves as critical phenomena", <i>Indian Ocean Review of Science and Technology</i> , Institut Supérieur Polytechnique de Madagascar (ISPM), Article 2/2013, 1-15 (2013).	100%
5	38. <b>W.M. Land</b> , Volchenkov, D., B. Bläsing, Th. Schack, "From Action Representation to Action Execution: Exploring the Links Between Cognitive and Biomechanical Levels of Motor Control", <i>Frontiers in Computational Neuroscience</i> <b>7</b> : 127, 1-14 (2013). doi: 10.3389/fncom.2013.00127	35%
4	37. Volchenkov, D., B. Bläsing, Spatio-temporal analysis of kinematic signals in classical ballet, <i>Journal of Computational Science</i> <b>4</b> (4), 285–292 (2013). Online: ISSN 1877-7503, 10.1016/j.jocs.2012.06.008	80%
3	36. Volchenkov, D., Ph. Blanchard, T. Krüger, "Heavy-tailed Distributions In Some Stochastic Dynamical Models", <i>Discontinuity, Nonlinearity and Complexity</i> <b>1</b> (1), 1-40 (2012)	80%

4	35. Volchenkov, D., JR. Dawin, "Musical Markov Chains ", International Journal of Modern Physics 16 (1) , 116-135 (2012) DOI: 10.1142/S2010194512007829	50%
3	34. Volchenkov, D., Ph. Blanchard, "Mathematical Analysis of Complex Networks and Databases", IAMP News Bulletin, International Association of Mathematical Physics, Ed. V.A. Zagrebnov, (January 2012), pp 17-22.	99%
4	33. Maurizio Serva, Volchenkov, D., F. Petroni, Søren Wichmann, "Malagasy Dialects and the Peopling of Madagascar", <i>Journal of Royal Soc. Interface</i> , <b>9</b> (66):54-67, doi:10.1098/rsif.2011.0228 (2011)	25%
5	32. Volchenkov, D., Ph. Blanchard, <b>F. Petroni</b> , M. Serva, "Geometric representations of language taxonomies," <i>Computer Speech and Language</i> DOI: 10.1016/j.csl.2010.05.003. On-line: http://dx.doi.org/10.1016/j.csl.2010.05.003 (2010); <i>Computer Speech and Language</i> <b>25</b> , 679–699 (2011).	60%
5	31. Volchenkov, D., Ph. Blanchard, JR. Dawin, "Markov Chains or the Game of Structure and Chance. From Complex Networks, to Language Evolution, to Musical Compositions", <i>The European Physical Journal - Special Topics</i> 184, 1-82 © Springer Berlin / Heidelberg (2010).	90%
5	30. Volchenkov, D., "Random Walks and Flights over Connected Graphs and Complex Networks", <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>16</b> (2011) 21–55 http://dx.doi.org/10.1016/j.cnsns.2010.02.016 (2010).	100%
4	29. Maurizio Serva, Volchenkov, D., Philippe Blanchard, Eric W. Holman, Filippo Petroni, Søren Wichmann, "The phylogeny of Malagasy dialects", in <i>Text Processing and Cognitive Technologies</i> 19, Kazan University Publ. (Kazan, Russia), 253-256 (2010).	45%
5	28. Volchenkov, D., "What is control of turbulence in crossed fields?" <i>Communications in Nonlinear Science and Numerical Simulation</i> , <i>15</i> pp. 149-181 (2009).	100%
4	27. Volchenkov, D., Ph. Blanchard, "Probabilistic embedding of discrete sets as continuous metric spaces", <i>Stochastics: An International Journal of Probability and Stochastic Processes</i> (formerly: <i>Stochastics and Stochastics Reports</i> ) <b>81</b> (3), 259-269 (2009)	99%

5	26. Volchenkov, D., "Renormalization group and instantons in stochastic nonlinear dynamics: From self-organized criticality to thermonuclear reactors." <i>The European Physical Journal - Special Topics</i> 1951-6355 Volume <b>170</b> (1), pp.1-142 © Springer Berlin/ Heidelberg (2009)	100%
4	25. Volchenkov, D., Ph. Blanchard, "Markov Chain Methods For Analyzing Urban Networks" <i>Journal of Statistical Physics</i> , 1572-9613 (Online), Vol. <b>132</b> , Number 6 /September, DOI 10.1007/s10955-008-9591-2, Pages 1051-1069 (2008).	99%
4	24. Volchenkov, D., Ph. Blanchard, "Intelligibility and first passage times in complex urban networks", <i>Proc. R. Soc. A</i> <b>464</b> , 2153–2167 (2008).	99%
4	23. Volchenkov, D., Ph. Blanchard, "Scaling and Universality in City Space Syntax: between Zipf and Matthew", <i>Physica A</i> <b>387</b> :2353-2364 (2008).	99%
3	22. Volchenkov, D., "Analysis of urban complex networks", ISSN 1607-324X Condensed Matter Physics, Vol. 11, No 2(54), pp. 331–340 (2008)	100%
3	21. Volchenkov, D., R. Lima, "Asymptotic series in dynamics of fluid flows: Diffusion versus bifurcations," <i>Communications in Nonlinear Science and Numerical Simulation</i> <b>13</b> (7) 1329–1342 (2008).	99%
3	20. Volchenkov, D., Ph. Blanchard, "Random Walks Along the Streets and Channels in Compact Cities: Spectral analysis, Dynamical Modularity, Information, and Statistical Mechanics", <i>Phys. Rev. E</i> <b>75</b> , 026104 (2007).	99%
4	19. Volchenkov, D., Ph. Blanchard, "Nonlinear Diffusion through Large Complex Networks with Regular Subgraphs", <i>Journal of Statistical Physics</i> <b>127</b> (4), 677-697 (2007).	99%
4	18. Volchenkov, D., R. Lima, "Stochastic and Discrete Time Models of Long-Range Turbulent Transport in the Scrape-Off Layer ", <i>Int. Journal of Mod. Physics B</i> , Vol. <b>19</b> , No. 28, 4195-4218 (2005).	99%
4	17. Volchenkov, D.," Stochastic Models of Edge Turbulent Transport in the thermonuclear reactors", <i>IoP: Journal of Physics</i> Vol. 7, pp. 214-226 (2005).	100%
3	16. Volchenkov, D., R. Lima," Random Shuffling of Switching Parameters in a Model of Gene Expression Regulatory Network", <i>Stochastics and Dynamics</i> <b>5</b> (1), pp. 75-95 (2005).	99%

4	15. E. Floriani, Volchenkov, D., R. Lima, "A System close to a threshold of instability", <i>J. of Physics A</i> : Math. General <b>36</b> , 4771-4783 (2003).	33%
5	14. Volchenkov, D., L. Volchenkova, Ph. Blanchard, "Epidemic Spreading In A Variety Of Scale Free Networks", <i>Physical Review E</i> <b>66</b> (4), 046137 (2002).	60%
4	13. Volchenkov, D., L. Volchenkova, Ph. Blanchard, "Epidemic Spreading In Scale Free Networks". Virtual <i>Journal of Biological Physics Research</i> , Vol. <b>4</b> (9) (2002).	70%
4	12. Volchenkov, D., Blanchard, Ph., "An algorithm generating random graphs with power law degree distributions. <i>Physica A</i> -Statistical Mechanics And Its Applications <b>315</b> (3-4): 677–690 (2002).	99%
4	11. Volchenkov, D., <b>S. Sequeira</b> , Ph. Blanchard, M.G. Cosenza, "Transitions to Intermittency and Collective Behavior in Randomly Coupled Map Networks", <i>Stochastic and Dynamics</i> <b>2</b> (2), 203-223 (2002).	70%
4	10. Volchenkov, D., Cessac B., Blanchard, Ph., "Quantum Field Theory Renormalization Group Approach To Self-Organized Critical Models. The Case Of Random Boundaries", <i>Intern. Jour. of Mod. Phys.</i> B16 (8) 1171-1204 (2002).	85%
4	9. Volchenkov, D., Lima. R., "Instanton solutions in the problem of wrinkled flame-front dynamics", <i>Phys. Rev. E</i> 64 (1), 011204-011219 (2001).	99%
4	8. Volchenkov, D., "The Bending Instability in the Vorticity Transport through a Turbulent Flow. Feedback Chaos Controlling and Dynamical Symmetry Breaking", <i>Intern. Jour. of Mod. Phys. B</i> <b>15</b> (7/8) 1147-1164 (2001).	100%
4	7. Volchenkov, D., Lima, R, "A phase transition in the water coupled to a local external perturbation", <i>Chaos</i> <b>10</b> (4) 803-711 (2000).	99%
4	6. Volchenkov, D., Lima, R., "Renormalization group approach to the problem of flow through irregular packed beds." <i>Intern. Jour. of Mod. Phys. B</i> <b>14</b> (9) 963-981 (2000).	99%
4	5. Volchenkov, D.," Field-theoretic approach to a stochastic magnetohydrodynamics: the dimensions of composite operators. ", <i>Phys. Lett. A</i> , <b>265</b> (1-2), 117-122 (2000).	100%

3	4. Volchenkov, D., "Composite operators of the canonical dimension $d = 3$ in magneto-hydrodynamic turbulence." Acta of the Saint Petersburg State University, Series 4: <i>Physics &amp; Chemistry</i> , <b>2</b> (18) 9-16 (1997) (in Russian)	100%
3	3. Volchenkov, D., Adzhemyan L., Nalimov M., "Renormalization group study of correlation functions and composite operators in the stochastic magneto-hydrodynamics model." <i>Theoretical and Mathematical Physics</i> 107 (1) 533-543 (1996).	80%
3	2. Volchenkov, D., Nalimov, M., "The corrections to fully developed turbulent spectra due to the compressibility of fluid", <i>Theoretical and Mathematical Physics</i> <b>106</b> (3) 307-318 (1996).	80%
2	1. Volchenkov, D., Borin, V., "Quantum-field renormalization group approach to the theory of turbulence: critical scaling and the critical dimensions of composite operators", Acta of Saint Petersburg State University, Series 4: Physics & Chemistry, <b>2</b> (11) 55-64 (1994) (in Russian).	90%

## **Currently Submitted Research Articles**

Rating	Article	Contribution
	Sithma Jayawardena, Ori Swed, Dimitri Volchenkov; "Politically Critical	
	Period: Elections and Political Violence in Africa", Journal: Electoral Studies	
	Manuscript Number: JELS-D-23-00262.	

### **Selected Publications on Education and Teaching**

Article	Contribution
7. Volchenkov, D., "400 Etudes in Physics. The selected problems of the Saint Petersburg Physics Olympiads". The Publishing house of the Moscow Center for Continuous Mathematical Education Moscow © 2008 (in Russian) 497 pages.	100%
6. Volchenkov, D.: <i>Art of Problem Solving in College Physics</i> , 222 pages, the Education Committee of St-Petersburg Administration and StPetersburg State University, StPetersburg (in Russian) (2004).	100%
5. Volchenkov, D.: <i>Advanced Problems in College Physics</i> , Annual Brochure issued by the Education Committee of St-Petersburg Administration and StPetersburg State University, StPetersburg,	100%

Annual Issues: 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, ©Education Committee of St-Petersburg Administration, ©Saint-Petersburg State University (in Russian) 1995-2004. 4. Volchenkov, D.: Selected Problems of St.-Petersburg's Physics Olympiads. In memoriam of 275 Anniversary of St.-Petersburg State University, ISBN: 5-88494-063-7, ©Education Committee of St-Petersburg Administration, ©St.-Petersburg State 100% University, St.-Petersburg, 124 pages (in Russian) (2003). 3. Volchenkov, D.: Supply on Advanced Problems in College Physics, ©Education Committee of St-Petersburg Administration, ©St.-Petersburg State University, St.-100% Petersburg, 104 pages (in Russian) (1999). 2. Volchenkov, D., R. Kolalis, A. Kurdyumov: St.-Petersburg Physics Olympiads, Acta of Russian Education Ministry: Physics, N24 April 2003 (in Russian). 33% 1. Volchenkov, D., Kovalevsky D., "Selected problems of Saint Petersburg Physics 50% Olympiad", Quantum 75, 84-85 (1993) (in Russian). **Publicist articles** 1. Volchenkov, D., "Russia as an alternative to life?" Demographic prospects of the Russian Federation. "Deal", a Weekly Newspaper (Дело), 12/1/2008 (in Russian). 100% Available at http://www.idelo.ru/534/17.html

### Monographs (Contribution 100%)

Book Title	Sold Chapters
7. Volchenkov, D., " Grammar of Complexity: From Mathematics to a Sustainable World", in <i>World Scientific</i> Series " <i>Nonlinear Physical Science</i> ", ISBN: 978-981-3232- 49-5 (hardcopy), 981-3232-49-8; ISBN: 978-981-3232-50-(ebook), 981-3232-50- 1(ebook), 300 pp, Mar 2018	9,345
6. Volchenkov, D., "Survival under Uncertainty an Introduction to Probability Models of Social Structure and Evolution", Springer Series: Understanding Complex Systems, 240 pages, ISBN 978-3-319-39419-0, Berlin / Heidelberg © 2016.	8,580
5. Volchenkov, D., Ph. Blanchard, "Introduction to Random Walks and Diffusions on Graphs and Databases", © <i>Springer Series in Synergetics, Vol.</i> 10, Berlin / Heidelberg,	19,248

ISBN 978-3-642-19591-4, 340 pages; http://dx.doi.org/ 10.1007/ 978-3-642-19592-1 (2011).

4. Volchenkov, D., Ph. Blanchard, *Mathematical Analysis of Urban Spatial Networks*, © Springer Series *Understanding Complex Systems*, Berlin / Heidelberg. ISBN 978-3-540-87828-5, 181 pages (2009).

3. Volchenkov, D., "400 Etudes in Physics. The selected problems of the Saint Petersburg Physics Olympiads". The Publishing house of the Moscow Center for Continuous Mathematical Education Moscow © 2008 (in Russian) 497 pages.

2. Volchenkov, D., «*Utilisation des Méthodes Nonperturbatives de Théorie Quantique des Champs en Dynamique Stochastique*», 212 pages© University of Aix-Marseille-2 (2007). (in French)

1. Volchenkov, D., "*Renormalization group in the theory of fully developed turbulence*", Ph D Thesis, 112 pages© Saint Petersburg State University (1996)

### **Edited Contributed Volumes and Journal Special Issues**

Title

11. "New Perspectives on Nonlinear Dynamics and Complexity", Springer Series Nonlinear Systems and Complexity (NSCH, volume **35**), Eds: Dimitri Volchenkov, Albert C. J. Luo, ISBN: 978-3-030-97328-5 DOI <u>https://doi.org/10.1007/978-3-030-97328-5</u> (16 Sep, 2022) <u>https://link.springer.com/book/10.1007/978-3-030-97328-5</u>

10. Special Issue "*Entropic Forces in Complex Systems II*" (Guest Ed.: Volchenkov, D) *Entropy* (ISSN 1099-4300) Section "Complexity" <u>https://www.mdpi.com/journal/entropy/special\_issues/EFCS\_II</u> Deadline for manuscript submissions: 15 July 2022

9. Special Issue "*Modeling and Forecasting of Rare and Extreme Events*" (Guest Eds.: Volchenkov, D., J.A. Tenreiro Machado) *Entropy* (ISSN 1099-4300) Section "Complexity" (6 papers) <u>https://www.mdpi.com/journal/entropy/special\_issues/Forecast</u> (closed Dec 15, 2021)

8. "*Mathematical Topics on Modelling Complex Systems*", Tenreiro Machado, J. A., Volchenkov, Dimitri (Eds.), Springer International Publishing, Vol. X in Series *Nonlinear Physical Science*, DOI: 10.1007/978-981-16-4169-5, Hardcover ISBN-13:978-981-16-4168-8, February 15, 2022 <u>https://www.springer.com/us/book/9789811641688</u>

7. "*The Many Facets of Complexity Science*", Volchenkov, Dimitri (Ed.), Springer International Publishing, Vol. **VII** in Series "*Nonlinear Physical Science*", Springer International Publishing AG, Beijing, & Berlin

Heidelberg, Aug 2021 (EU), September 2021 (USA) ISBN: 978-981-16-2853-5 https://link.springer.com/book/10.1007%2F978-981-16-2853-5

6. "Mathematical Methods in Modern Complexity Science", Volchenkov, Dimitri, Tenreiro Machado, J. A. (Eds.), Springer International Publishing, Vol. 33 in Series Nonlinear Systems and Complexity, V. 250 pages, DOI: 10.1007/978-3-030-79412-5, Hardcover ISBN: 978-3-030-79411-8, eBook ISBN: 978-3-030-79412-5, June 2022 <u>https://www.springer.com/gp/book/9783030794118</u>

5. "Nonlinear Dynamics, Chaos, and Complexity. In Memory of Professor Valentin Afraimovich, (Ed.: Volchenkov, D.) in Springer Series "Nonlinear Physical Science", Springer International Publishing AG, Beijing, & Berlin Heidelberg (January 14, 2021). <u>https://www.springer.com/gp/book/9789811590337</u>

4. Special Issue " *Entropic Forces in Complex Systems*", (Ed.: Volchenkov, D.) *Entropy* (ISSN 1099-4300) Section "Complexity" <u>https://www.mdpi.com/si/entropy/EFCS</u> (28 February 2021)

3. Special Issue "*Mathematical Analysis of Urban Spatial Networks*", (Ed.: Volchenkov, D.) *Entropy* (ISSN 1099-4300) Section "Complexity" <u>https://www.mdpi.com/journal/entropy/special\_issues/math\_urban</u> (31 December 2020)

2. "*Regularity and Stochasticity of Nonlinear Dynamical Systems*" (Eds.: Volchenkov, D., Leoncini, X.) 12 chapters, in Springer/HEP Series "*Nonlinear Systems and Complexity*", DOI 10.1007/978-3-319-58062-3, Electronic ISBN: 978-3-319-58062-3, Print ISBN: 978-3-319-58061-6Springer International Publishing AG, Beijing, & Berlin Heidelberg (2017).

1. *Mathematics of Multi-level Anticipatory Complex Systems* (Ed.: Volchenkov, D) of the Journal *Discontinuity, Nonlinearity, and Complexity* 3(3), 2014. ISSN 2164-6376 (print), ISSN 2164-6414 (online)

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#### Chapter

59. Shirvani, A., Volchenkov, D. "A Regulated Market Under Sanctions. On Tail Dependence Between Oil, Gold, and Tehran Stock Exchange Index". In: Tenreiro Machado, J.A., Volchenkov, D. (eds) *Mathematical Topics on Modelling Complex Systems*.
50% Ch.6, pp. 87-104. In *Nonlinear Physical Science* Springer book series, Singapore. https://doi.org/10.1007/978-981-16-4169-5\_6 (09 June 2022).

58. Volchenkov, D., "A Pandemic Three-Sided Coin". In Carla M.A. Pinto (eds) *Nonlinear* **100%** *Dynamics and Complexity. Mathematical Modelling of Real-World Problems*. In Springer

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57. Volchenkov, D., "Uncertainty in Epidemic Models Based on a Three-Sided Coin. In: Volchenkov, D., Luo, A.C.J. (eds) <i>New Perspectives on Nonlinear Dynamics and</i>	
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	Contribution
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Равнозначного Выбора. Синтез Методов Статистики И Машинного Обучения в Экосистеме Данных», стр. 49-55 в «Математическая психология: современное состояние и перспективы». Материалы международной научной конференции, посвященной 90-летию со дня рождения В.Ю. Крылова, 26–27 октября 2023 г., Москва, Ред.: Д.В. Ушаков, А.Л. Журавлев, Т.Н. Савченко, Г.М. Головина, Российская академия наук, Институт психологии (2023)	
<ul> <li>15. Ewa Banaszak, Debopriyo Banerjee, Robert Florkowski, Agnieszka Ginter, Patrycja Karpińska, Konrad Kocjan, Tyll Krueger, Sudipta Saha, Dima Volchenkov, "Men And The Clothing. Wrocław Fashion Project", pages 67-80 in "Fashion On The Move: Rethinking Design" (Eds., Alicia Urgellés Molina, Marta Torregrosa Puig, Cristina Sánchez-Blanco), The Proceedings of 10th International Fashion Conference, Servicio de publicaciones de la Universidad de Navarra, Pamplona (2016);</li> </ul>	15%
14. E. Banaszak, <b>K. Kocjan</b> , T. Krüger, Volchenkov, D., "Coding and Modelling Daily Life Dressing", in <i>Fashion: Exploring Critical Ideas</i> , Oxford University, UK (2013)	25%
In Proceedings CD-ROM " <i>The Sciences of Complexity: From Mathematics to Technology, to a Sustainable World</i> " (Eds.: Ph. Blanchard, R. Lima, L.Streit, R. V. Mendes) © ZiF - Center for Interdisciplinary Research, Bielefeld, Germany (2001):	
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"Mathematical Technology of Networks- QGraph". (Ed.: Delio Mugnolo) Springer Series: Proceedings in Mathematics & Statistics (2015); available at <u>http://arxiv.org/abs/1512.04340</u> .	
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• Benoit Rittaud, "Repérer les ghettos", La Recherche 415, 28 (2008).	
• "The future poverty hiding in cities", <i>Australasian Business Intelligence</i> November 12, 2007.	
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M. Puttke, B. Bläsing, Volchenkov, D., " <i>Ballett im Hightech-Labor</i> "; 3sat.de : FOYER – Das Theatermagazin; Dienstag, 13. July 2010, 22:25. (in German)	33%
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International George M. Zaslavsky Award	2020
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**RESEARCH AWARDS** 

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George Soros Graduate Student Award Open Society Institute, New York, USA	1995
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### PROFESSIONAL PRESENTATIONS AND CONFERENCE SESSION CHAIRING

#### **Conferences and Workshops**

10/2023	"Analysis of behavioral patterns of equal choice / Synthesis of statistical and machine learning methods in a data ecosystem" in "Mathematical psychology: current state and prospects", Scientific conference on mathematical psychology, dedicated to the 90th anniversary of the birth of V.Yu. Krylov, Institute of Psychology of the Russian Academy of Sciences (IP RAS), 10/26-27/2023, Moscow (Russia)
02/2023	with O. Swed, <b>Sachit Dassanayaka</b> , "The social footprint of Russian Trolls in influence operations" at Eastern Sociological Society Conference 2023, Hyatt Regency Baltimore in the Inner Harbor, February 23-26, 2023
11/2022	with <b>Md Saiful Islam Saif &amp; Naima Alam</b> , "Imbalanced Machine Learning Technique to Predict Heart Disease", Poster, 5th Annual Meeting of the SIAM Texas- Louisiana Section. Hosted by the University of Houston, TX, November 4- 6, 2022.
11/2022	with <b>Naima Alam</b> , "Model selection for zero inflated count data from Demographic Health Survey", Poster, 5th Annual Meeting of the SIAM Texas-Louisiana Section. Hosted by the University of Houston, TX, November 4- 6, 2022.
10/2022	with O. Swed, <b>Sithma Jayawardena</b> , "Elections and Political Violence in Africa" The International Studies Association Southern Region, ISA-South St. Augustine 2022 Conference, October 7-8 in St. Augustine, FL hosted by Flagler College, "Rethinking Globalization: A Local Look at Global Issues."
09/2022	with Steve Suh (TAMU), Joint Invited talk entitled "Statistical Mechanics of Dynamic Complex Networks at the Online Conference on Nonlinear Science and Complexity", which took place during September 26-29, 2022 in Thessaloniki, Greece.

09/2022	with O. Swed, <b>Sithma Jayawardena</b> , "Politically Critical Period: Elections and Political Violence in Africa" at Table 13: Discourse on Politics in Political Sociology Roundtables at the American Social Association (ASA) Annual Meeting 2022.
03/2022	"Fractional Markov Chains" on the "Fractional kinetics, hydrodynamic limits and fractals" workshop at the Isaac Newton Institute for Mathematical Sciences, Cambridge, UK Mon 21st Mar 2022 - Fri 25th Mar 2022
01.2022	with O. Swed, <b>Sithma Jayawardena</b> , "Elections and Political Violence in Africa", Southern Political Science Association Annual Meeting panel: Civil Conflict and Political Violence, Jan 15 2022, University of Houston, TX
03.2022	with O. Swed, <b>Sachit Dassanayaka</b> , "Keeping it Authentic: The Social Footprint of the Trolls' Network", 92nd Annual Meeting 2022 Eastern Sociological Society Meeting "Strategic Sites and Ways for Sociology to Fight Inequality and Injustice". March 10-13, 2022, Boston, MA
02.2022	with O. Swed, <b>Sachit Dassanayaka</b> ," A Neural Network model to map the Russian Information Operation Networks and Three-Dimensional Geometric Visualization" 2022 American Statistical Association Conference on Statistical Practice, Session Type: Poster Session Topic: Implementation and Analysis, Feb 1-3, 2022, New Orleans, Louisiana.
01.2022	with O. Swed, <b>Sachit Dassanayaka</b> ," A Model to Uncover the Concealed Activity Trends of the Russian Information Operation Networks through a Geometric Representation", 2022 Joint Mathematics Meetings (JMM 2022), AMS Contributed Paper Session, January 5-8, 2022, Seattle, WA
10.2021	The 2nd Online Conference on Nonlinear Dynamics and Complexity, October 4-6 2021 <u>http://second.ndc.lhscientificpublishing.com</u> , The Instituto Politécnico do Porto, Greenwich Mean Time PORTUGAL INVITED TALK: "Assessing Pandemic Uncertainty on Conditions of Vaccination and Self-isolation"
10.2021	Chairing the Invited talks sessions @ The 2nd Online Conference on Nonlinear Dynamics and Complexity, <u>http://second.ndc.lhscientificpublishing.com</u> , The Instituto Politécnico do Porto, October 4-6 2021 Greenwich Mean Time PORTUGAL

11.2021	with <b>Thilini Mahanama</b> , Title: "Recovering the Compensation Strategies for Tornado-induced Property Losses via Statistical Manifold Learning", 11/24-26/2021 International Conference on Multidisciplinary Approaches in Science – 2021, Faculty of Science, University of Colombo, Sri Lanka
03.2021	with <b>Thilini Mahanama</b> , Title: "Tornado Property Loss Scale: Up to \$8 Billion by 2025. Classification, Dependence, and Prediction of Tornado Events in the U.S.", 2021 ASA Symposium on Data Science & Statistics Abstract ID: 309825 Session Type: Lightning Topic: Practice and Applications. Virtually June 2–4, 2021
11.2020	Chairing the Nonlinear Dynamics and Complexity (General) session @ The 1st Online Conference on Nonlinear Dynamics and Complexity Central Time Zone, USA, Nov 23-28 2020 <u>http://ndc.lhscientificpublishing.com/plenary-talks/.</u>
11.2020	Chairing the Invited talks sessions @ The 1st Online Conference on Nonlinear Dynamics and Complexity <u>http://ndc.lhscientificpublishing.com/plenary-talks/;</u> Central Time Zone, USA, Nov 23-28 2020.
11.2020	Keynote/Plenary Address @ The 1st Online Conference on Nonlinear Dynamics and Complexity <u>http://ndc.lhscientificpublishing.com/plenary-talks/;</u> Central Time Zone, USA, Nov 23-28 2020.
11.2020	"How Structure Creates Force", Inaugural Talk in response to <i>George M. Zaslavsky Award</i> (International) issued by the Nonlinear Science and Complexity Conference Series (http://ndc.lhscientificpublishing.com/awards/) in testimony of the high regard of achievements in Nonlinear Science and Complexity (USA) @ The 1st Online Conference on Nonlinear Dynamics and Complexity <u>http://ndc.lhscientificpublishing.com/plenary-talks/;</u> Central Time Zone, USA, Nov 23-28 2020.
10.2020	with <b>Thilini Mahanama</b> , "Tornado Property Loss Scale: Up To \$8 Billion By 2025" Poster, 3rd Annual Meeting of the SIAM Texas-Louisiana Section & the Department of Mathematics at Texas A&M University October 16 - October 18, 2020
10.2020	with <b>Thilini Mahanama</b> , "Tornado Property Loss Scale: Up To \$8 Billion By 2025" Poster on the 2020 Women in Statistics and Data Science Virtual Conference, American Statistical Association (10.01.2020)
06.2020	with Thilini Mahanama,

2020 ASA Symposium on Data Science & Statistics in Pittsburgh, Pennsylvania, June
3-6, 2020 POSTER: abstract ID # 308322, titled "A Severe Weather Index Based on
the Historic National Oceanic and Atmospheric Administration (NOAA) Data."

## with Thilini Mahanama,

02.2020	2020 ASA Conference on Statistical Practice (CSP) in Sacramento, CA, February 20– 22 POSTER: abstract ID #304047, titled "A Severe Weather Index Based on the Historic National Oceanic and Atmospheric Administration (NOAA) Data."
08.2018	7th International Conference on Nonlinear Science and Complexity, San Luis Potosí, México, August 14–17th, 2018 INVITED TALK: Complexity Grammar.
05.2018	<ul> <li>XVI Emmy Noether High School Mathematics Days,</li> <li>Department of Mathematics and Statistics, Texas Tech University</li> <li>POSTER: Smart and connected model for water resource management</li> <li>POSTER: Decoding United States Severe Weather Events</li> </ul>
05.2017	<ul> <li>Summer Workshop on Nonlinear Dynamical Systems,</li> <li>Sichuan University of Science and Engineering, Zigong, China, 8- 9 May 2017</li> <li>INVITED TALK: An introduction to Probability Models of Social Structure and Evolution</li> <li>INVITED TALK: Data Analysis by Scale Dependent Anisotropic Random Walks.</li> </ul>
04.2016	10th International Fashion Conference: Fashion On The Move: Rethinking Design University of Navarra, April 20-22st, 2016 Pamplona, Spain. INVITED TALK: Men and The Clothing. Wrocław Fashion Project
04.2016	<ul> <li>Biofotonica, Ciencia y Aplicaciones, XVI Semana del IICO</li> <li>San Luis Potosi, SLP, Mexico, 16-19 April, 2016,</li> <li>INVITED TALK: Geometrize everything with Monge-Kantorovich?</li> <li>INVITED TALK: Survival under Uncertainty An Introduction to Probability Models of Social Structure and Evolution.</li> </ul>
03.2016	Complex Networks Winter Session 2016 Ibaraki University, Mito, Ibaraki, Japan, March 7-9, 2016 INVITED TALK: The Kantorovich transportation metric for networks and databases.
12.2015	The Innovation, Organization, and Strategy Università Ca'Foscari di Venezia, Italy, December 17-18, 2015 INVITED TALK: We speak up the time, and time bespeaks us.

06.2015	The international Conference Dynamics of Multi-Level Systems The Max Planck Institute for the Physics of Complex Systems Dresden, Germany,15 - 19 June 2015 INVITED TALK: Time and Institutions.
03.2015	Workshop: Mathematics of Complex Systems, Center for Interdisciplinary Research, Bielefeld University, March 18 -19, 2015 INVITED TALK: Quantum Field Theory methods in neuronal networks dynamics.
12.2014	MatheMACS Fall Meeting MPI for Mathematics in the Sciences Leipzig, Germany, 2-5 December 2014 INVITED TALK: Collection and processing of empirical data on multimodal human communications.
09.2014	<ul> <li>Workshop Analytical approaches to financial and economic problems</li> <li>Università Politecnica delle Marche in Ancona, Italy, September 9-10 2014</li> <li>INVITED TALK: Integration of databases for forecasting the future trends: Maddison historical GDP +Polity IV (Political Regimes) + The World Top income database;</li> <li>INVITED TALK: Acceleration of time &amp; hyper-competition as the key factors of evolution &amp; sustainable development.</li> </ul>
09.2014	<ul> <li>ECCS'14 European Conference on Complex Systems</li> <li>IMT Institute for Advanced Studies, Lucca, Italy, 22-26 September 2014</li> <li>POSTER: Real world data analysis and interpretation with random walks;</li> <li>POSTER: Exploration, Exploitation, and Evolution. In search of a unified theory</li> </ul>
06.2014	<ul> <li>The 6th Meeting of the Theoretical Organization Models Society University of Southern Denmark, Odense, 6-8 June 2014</li> <li>POSTER: Acceleration of time &amp; hyper-competition as the key factors of evolution &amp; sustainable development;</li> <li>OFFICIAL DISCUTANT: An Introduction to Sequential Dynamical Systems.</li> </ul>
05.2014	MatheMACS Spring Meeting INRIA, Sophia-Antipolis, France, May 14-15, 2014 INVITED TALK: Analysis and Validation of Data from Multi-Level Anticipatory Complex Systems.
02.2014	Workshop: Non-Commutative Stochastic Systems: Analysis, Modelling, and Applications Tohoku University, Sendai, Japan, February 3 - 7, 2014

	• INVITED TALK: Path-integral distance for the data analysis;
	• INVITED TALK: Coherent noise models for Exploration, Exploitation, and Evolution.
	Workshop Mathematical Technology of Networks- QGraphs,
12.2013	Bielefeld University, Germany, December 4-7 2013 INVITED TALK: Random Walks for Data Analysis.
	MatheMACS Fall Meeting
12.2013	Max-Planck-Institute for Mathematics in the Sciences, Leipzig, Germany 2-5 Dec. 2013
	INVITED TALK: Path integral as a graph theoretic distance.
	The joint TOPDRIM - MATHEMACS workshop Mathematics of Complex Systems
10.2013	Bielefeld University, Germany, October 7 - 9 2013 INVITED TALK: The realm of Random Walks.
	ECCS'13 European Conference on Complex Systems
09.2013	Satellite meeting: Mathematical Methods in Multi-Level Systems Barcelona, Spain, 16-20 September 2013.
07.2010	INVITED TALK: Random Walks for Data Analysis.
	Fashion: Exploring Critical Ideas
09.2013	Mansfield College, Oxford University, UK, 9-12 September 2013 TALK: Coding and Modelling Daily Life Dressing
	CS2Bio 2013, 4th International Workshop on Interactions between Computer Science
06 2012	and Biology,
06.2013	Florence, Italy, 6-9 June 2013 TALK: Exploration-exploitation trade-off in a treasure hunting game.
	MatheMACS Spring Meeting
0.5.0010	Max-Planck-Institute Mathematics in the Sciences Leipzig, Germany, 13-15 May, 2013
05.2013	INVITED TALK: Analysis and Validation of Data from Multi-Level Anticipatory Complex Systems.
05 0010	AMARSi Workshop (Compliant Mechanics, Morphological Computation, Human
05.2013	And Robotic Motor Control) Bielefeld University, Germany, May 22 – 24 2013

	POSTER: From Action Representation to Action Execution: Exploring the Links Between Mental Representation and Movement.
02.2013	234 Ecole de Physique Univerisy of Geneve, Genève, Switzerland INVITED TALK: Markov Chain Analysis of Complex Networks and Databases.
10.2012	Workshop: Mathematics of Multi-level Anticipatory Complex systems The Max Planck Institute Mathematics in the Sciences, Leipzig, Germany 15-17 Oct 2012 INVITED TALK: Data Analysis of Multi-level systems
10.2012	Workshop: Data Analysis Center for Interdisciplinary Research, Bielefeld University, Germany 7-9 October 2012 INVITED TALK: Analysis and Validation of Data in Multi-level systems.
09.2012	<ul> <li>CREST Workshop Random Media II</li> <li>Tohoku University, Sendai, Japan September 3-7 2012</li> <li>INVITED TALK: Introduction to Random Walks and Diffusions to Network and Databases: from Electric Network to Urban Spatial Networks;</li> <li>INVITED TALK: Markov chain methods in Language Evolution and Musical Dice Games.</li> </ul>
07.2012	The International Conference on Nonlinear Dynamics and Complexity Jinan, Shandong, China, July 23-29, 2012 INVITED TALK: Mathematical Analysis of Complex Networks and Databases.
11.2011	AMARSi Workshop (Compliant Mechanics, Morphological Computation, Human And Robotic Motor Control) Bielefeld University, Germany, 22 – 24 November 2011 TALK: Spatio-temporal Analysis of Human Movements.
09.2011	<ul> <li>ECCS'11 - European Conference on Complex Systems</li> <li>Vienna, Austria, September 12-16 2011</li> <li>POSTER: Tumbling Dice with Classical Music;</li> <li>POSTER: Modularity and Informational Aspects of Classical Dance;</li> <li>POSTER: Dynamics and Evolution of Languages in the Indo-European and Austronesian Language Families.</li> </ul>
07.2011	SigmaPhi2011, Interdisciplinary applications of statistical physics. Econophysics and Sociophysics, Europhysics Conference on Statistical Physics

Larnaca, Cyprus, 11-15 July 2011

- POSTER: Tumbling Dice with Classical Music;
- POSTER: Modularity and Informational Aspects of Classical Dance;
- POSTER: Dynamics and Evolution of Languages in the Indo-European and Austronesian Language Families.

Conference: Chaos, Complexity and Transport Marseille, France, 23-27 May 2011 • POSTER: Tumbling Dice with Classical Music; 05.2011 • POSTER: Modularity and Informational Aspects of Classical Dance; • POSTER: Dynamics and Evolution of Languages in the Indo-European and Austronesian Language Families. Workshop: Architecture of Human Motor Action: From Kinematics to Cognitive Models Center for Interdisciplinary Research, University of Bielefeld, Germany, May 05.2011 2 - 3, 2011 TALK: Spatio-temporal Analysis of Human Movements in Classical Dance. Workshop on Evolution of Human Language, University of Bielefeld, Germany, 28-29 April 2011 04.2011 INVITED TALK: Levenshtein's distance for measuring lexical evolution rates. International Symposium on Scientific Computing for the Cognitive Science Heidelberg, Germany 6-8 October 2010 10.2010 TALK: Spatio-temporal Analysis of Full-body Movement in Classical Dance. The XII-th International Conference: Cognitive Modeling in Linguistics Dubrovnik, Croatia, September, 6-12 2010 09.2010 TALK: The phylogeny of Malagasy dialects. III International Dance Summit Berlin Apollo-Saal der Staatsoper Unter den Linden, Berlin, Germany 8-16 May, 2010 05.2010 INVITED TALK: DANAMOS: Dance Native Motion System. Symposium: Intelligence and Action II - New Perspectives in Dance & Cognitive Science 11.2009 Bielefeld University, Germany, November 11-14, 2009 INVITED TALK: Analysis of Dance Movement. 10.2009 Symposium: Evaluating R&D collaboration networks in Europe Bielefeld University, Germany, October 20 - 23, 2009

	TALK: Mathematical analysis of urban spatial networks.
09.2009	Symposium: Frontiers in Network Science, Carl von Ossietzky University of Oldenburg, Germany, 28 - 30 September 2009 TALK: Understanding of Networks & databases.
09.2009	Symposium: Complexity, Mathematics and Socio-Economic Problems, Bielefeld University, Germany, August 31 - September 12, 2009 INVITED TALK: First encounters in urban spatial networks and beyond.
08.2009	XXII Conference of the European Physical Society Rome, Italy, 25-29 August, 2008 TALK: Future poverty hiding in cities.
07.2008	International Conference in Statistical Physics, Orthodox Academy of Crete, Kolympari, Greece, 14-18 July 2008 INVITED TALK: Future poverty hiding in cities.
05.2008	VI Seminar on Stochastic Analysis, Random Fields and Applications Centro Stefano Franscini, Ascona, Switzerland, May 19 - May 23, 2008 TALK: Exterior Algebra Of Random Walks Defined On Undirected Graphs.
05.2008	Sociophysics: Status and Perspectives, ISI Foundation, Villa Gualino, Torino, Italy, May 26th - 29th, 2008 TALK: Future poverty hiding in cities.
02.2008	Workshop: Evolution and Structure of Complex Systems and Networks, Bielefeld University, Germany, February 25-29, 2008 INVITED TALK: A way of looking at urban space syntax.
11.2007	Workshop: Theoretical Aspects and Models of Large, Complex and Open Information Networks ISI Foundation, Villa Gualino, Torino, Italy, November 19th - 21st, 2007 TALK: Markov Processes and Spectral Analysis.
09.2007	Workshop: Stochastic Networks and Internet Technology Scuola Normale Superiore, Pisa, Italy, 16-21 September 2007 TALK: Random graph models for complex networks.
08.2007	Workshop: Stochastics and Real World Models II Bielefeld University, Germany, 27-31 August 2007 TALK: City Space Syntax as a Complex Network.

	Madeira Math Encounters XXXIII
08.2007	Funchal University, Madeira, Portugal, 14-20 August 2007
	• INVITED TALK: City Space Syntax as a Complex Network.
	• INVITED TALK: Spectral Analysis for City Space Syntax.
	Infinite Particle Systems III. Complex Systems: Theory and Applications
06.2007	Kazimierz Dolny, Poland 24-29 June, 2007
	TALK: Analysis of urban complex networks.
	Technologies Of The 21st Century: Biological, Physical, Informational And Social
	Aspects
09.2005	Pavlov Institute of Physiology, Saint Petersburg, Russia, September 27-29, 2005
	INVITED TALK: A toy model of gene expression regulatory network.
	Workshop: Chaotic Transport and Complexity in Fluids and Plasmas
06.2004	Carry le Rouet, Marseille, France, June 20-25, 2004
00.2001	INVITED TALK: Stochastic and Discrete Time Models of Long-Range Turbulent
	Transport.
	Plenary Session of the International Workshop GALILEO,
10.2003	University of Bologna, Bologna, Italy, 29 - 31 October 2003
	TALK: Stochastic ensembles of discrete time coupled map lattices.
	XXVII Days of Nonlinear Dynamics
12.2003	Luminy, Marseille, France, 12-17 December 2003
12.2000	TALK: Self-Organized Critical Model Of Long Range Turbulent Transport In The
	Scrape-Off-Layer.
	XIV Congress of Mathematical Physics: Stochastic Analysis (Satelite Conference)
	Madeira Univeristy, Funchal, Madeira, Portugal, 2-9August 2003
08.2003	• INVITED TALK: Growing networks and Regulatory networks;
	• INVITED TALK: Large Regulatory Networks of 'Anonymous' Genes.
06.2003	XXVI Days of Nonlinear Dynamics
	Luminy, Marseille, France 5-12 June 2003
	TALK: Bending Instabilities in Turbulent Flows and Magnetic Hydrodynamics.
06 2002	Workshop: Innovation, Evolution, and Society,
06.2003	University of Bielefeld, Germany, 17-21 June 2003

	TALK: World Wide Web as an Example of Autopoietic innovation networks: multi agent models and innovation.
05.2003	Workshop: Systèmes dynamiques, contrôle et réseaux génétiques, La Villa Clythia, Frejus, France, 2-9 May 2003 TALK: Modeling of the self-organized data network growth.
04.2003	Workshop : Rencontre Nice Marseille : UMR CNRS Université de Nice - Sophia Antipolis, Valbonne, France, 14-16 April 2003 TALK: Simulations on a gene regulation network model.
03.2003	XXIV Days of Nonlinear Dynamics Luminy, Marseille, France 1-8 March 2003 TALK: Algorithms Generating Scale Free Random Graphs.
07.2002	TH-2002. International Conference on Theoretical Physics, Paris, France, 22-27 July 2002 TALK: Epidemic Spreading on random graphs.
06.2002	Workshop in Complex Systems: New perspectives from Mathematics, Physics, and Biology, Bielefeld University, Germany, June 2002. TALK: Does the optimal immunization policy exist?
06.2002	1 <sup>st</sup> International Conference in Socio-Physics, Bielefeld University, Germany, June 2002 TALK: A toy society under attack. How to make a panic to subside?
05.2002	Workshop: On the Gibbs path: a random field trip Bielefeld University, Germany, May 2002 TALK: Epidemic Spreading In Scale Free Networks.
08.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, August 2001 TALK: Turbulence Driven by a Deterministic Chaotic Dynamics.
08.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World –The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, August 2001

	TALK: Field-theoretic approach to a stochastic magnetohydrodynamics the dimensions of composite operators.
08.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World –The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, August 2001 TALK: Asymptotic Lyapunov Exponents Spectrum for an Extended Chaotic Coupled Map Lattice.
05.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World –The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, July 2001 TALK: Instanton solutions in the problem of wrinkled flame fronts dynamics.
05.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Workshop "Percolation Phenomena: Basic Techniques and Applications" Center of Interdisciplinary Research (ZIF), Bielefeld, Germany, 7-12 May 2001 TALK: Renormalization Group Approach to the Problem of Flow Through Irregular Packed Beds.
05.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Workshop "Percolation Phenomena: Basic Techniques and Applications" Center of Interdisciplinary Research (ZIF), Bielefeld, Germany, 7-12 May 2001 TALK: A Phase Transition in the Water Coupled to a Local External Perturbation.
03.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World –The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, March 2001 TALK: Critical Behavior of the Water Coupled to a Local External Perturbation.
03.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, March 2001 TALK: The bending instability in the vorticity transport through a turbulent flow.
02.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, February 2001

	TALK: Implicit Construction of the Probability Invariant Measure for Randomly Coupled Map Networks
01.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, January 2001 TALK: On the application of the dynamical systems theory to social modeling
01.2001	The Sciences of Complexity: From Mathematics to Technology to a Sustainable World – The International Collaborative Research Year Center of Interdisciplinary Research, Bielefeld, Germany, January 2001 TALK: Thermodynamics of Coupled Piece-Wise Linear Chaotic Maps Defined on Random Regular Graphs
11.2000	International Workshop on Dynamical Neural Networks and Applications Center of Interdisciplinary Research, Bielefeld, Germany, 20-24 November 2001 TALK: Transitions to Intermittency and Collective Behavior in Randomly Coupled Map Networks
11.2000	International Workshop on Dynamical Neural Networks and Applications Center of Interdisciplinary Research, Bielefeld, Germany, 20-24November 2001 TALK: A Toy Model for a System at a Threshold of Stability
10.2000	2nd Bielefeld Workshop on Quantum Information and Complexity Center of Interdisciplinary Research, Bielefeld, Germany, 12-14 October 2001 TALK: Does Renormalization Group help very much in Self-Organized Criticality?
10.1997	<ul> <li>Fall Meeting APS/AAPT, Texas section</li> <li>University of North Texas, Denton TX, October 1997</li> <li>TALK: Field-Theory Approach to the Fully Developed Magneto-hydrodynamic turbulence.</li> <li>TALK: Functional Approach to Collective Intersubband Excitations in Quantum Wells.</li> </ul>
07.1994	Workshop: Integrable Systems & Quantum groups Steklov Mathematics Institute, Saint Petersburg, Russia, July 1994 TALK: On the p-adic theory of turbulence

# Seminars, Webinars, and Colloquia

03/2023	The Academic Discussion Club at The Institute of Psychology Russian Academy of Sciences, Moscow INVITED TALK: "What is the difference between statistical data processing and machine learning? An example with decision making using behavioral patterns" <u>https://youtu.be/egMkwvkEG7A</u>
03/2023	Webinar - Promoting Research among Undergraduates SLAAS and the Department of Mathematics, University of Kelaniya conducted a webinar on promoting research among undergraduates with Prof. Dimitri Volchenkov and Dr. Pushpi Paranamana on March 22, 2023. The main objective of this webinar is to promote research culture among undergraduate students with Mathematics/Statistics backgrounds and to encourage them to pursue higher studies. <u>https://youtu.be/yfBbvhkCgLY</u>
09.2021	Texas Tech University, Mathematics & Statistics, Departmental Colloquium: "The Saint Petersburg Paradox. Non-ergodicity, Risk, Predictability, Uncertainty, Navigation, etc."
07.2021	The Academic Discussion Club at The Institute of Psychology Russian Academy of Sciences, Moscow <u>https://youtu.be/sv9JXkLwnjA</u> INVITED TALK: "Survival under Uncertainty" (in Russian) following the book <u>https://www.springer.com/us/book/9783319394190</u> <u>https://ipran.ru/event/adk5/</u>
03.2021	Random Time Dynamical Systems International On-line Seminar <u>https://www.math.ttu.edu/~dvolchen/seminar.html</u> INVITED TALK: "Discrete Time Markov Chains with Random Transition Times – Fractional Markov Chains"
11.2020	Statistical Physics Seminar University of North Texas, College of Science, Department of Physics INVITED TALK: "Ergodic Walks in Finite Undirected Graphs: Ensembles, Entropic Variables, and Navigability"
2019 - 2020	<b>28 talks</b> with the funding sponsor, the AVX Aircraft Company, In the framework of the sponsored project "Multi-Source Data Fusion"
2016-2020	<ul> <li>11 talks at Texas Tech University:</li> <li>Applied Mathematics Seminar (Mathematics and Statistics)</li> <li>Probability, Differential Geometry, and Physics Seminar (Mathematics and Statistics)</li> <li>Physics and Astronomy Seminar (Physics and Astronomy)</li> <li>Seminar in Demography (Sociology, Anthropology, and Social Work)</li> <li>Brown Bag Seminar (Free Market Institute)</li> </ul>

	<ul> <li>Engineering Seminar (Industrial, Manufacturing &amp; Systems Engineering)</li> <li>Computer Science Seminar (Computer Science)</li> </ul>
2018-2019	<b>2 talks</b> in XVI and XVII Emmy Noether High School Mathematics Days Department of Mathematics and Statistics, Texas Tech University
12.2016	Applied Mathematics Seminar Department of Mathematical Sciences, University of Texas at Dallas INVITED TALK: An introduction to Probability Models of Social Structure and Evolution
11.2016	The Innovative Talents Recruitment Program ("1000 Talent plan of China") Sichuan Province Government, Chengdu, PR China INVITED TALK: Applied Analysis and Risk Prognostication for Complex Environmental, Social and Economic Systems
2001-2016	<ul> <li>19 talks at the University of Bielefeld, Germany</li> <li>Geometric Analysis Seminar (Dept of Mathematics)</li> <li>Physics Seminar (Center for Interdisciplinary Studies)</li> <li>Physics Seminar (Dept of Physics)</li> <li>Network Seminar (Dept of Physics)</li> <li>Lufthansa System Seminar (Bielefeld-Bonn Stochastic Research Center)</li> <li>The CITEC Club lectures (Center of Cognitive Interaction Technology)</li> <li>Public Health Seminar (Faculty of Health Sciences)</li> <li>Neurocognition and Motion (Biomechanik Fakultät für Psychologie und Sportwissenschaft)</li> <li>Behavioral Seminar (Faculty of Health Sciences)</li> <li>Cooperation Group: Discrete and Continuous Models in the Theory of Networks (Center for Interdisciplinary Studies)</li> </ul>
2012, 2016	<ul> <li>4 talks at Tohoku University, Sendai, Japan</li> <li>- Applied Mathematics Seminar (Mathematical Institute)</li> <li>- Mathematical System Analysis II Laboratory Graduate School of Information Sciences.</li> </ul>
12.2015	Applied Mathematics Seminar Sichuan Jiatong University, Sichuan, Chengdu, China INVITED TALK: An Introduction to the probability models of social evolution.
11.2015	Delft University of Technology

	Faculty of Aerospace Engineering, Delft, Netherlands INVITED TALK: Markov Chains for data interpretation.
2015	<b>10 talks</b> at Winter School "Nonlinear Dynamical Systems and Application" Sichuan University of Science and Engineering, Sichuan, Zigong, China
2014	<ul> <li>2 talks at Università Ca' Foscari, Venezia, Italy</li> <li>- Living Technology Seminar (European Centre for Living Technology)</li> <li>- Experimental Economics Seminar (Dept. Economics)</li> </ul>
06.2014	Applied Systems Analysis Seminar International Institute for Applied Systems Analysis, Laxenburg, Austria INVITED TALK: Real world data analysis and interpretation.
04.2014	Applied Mathematics Seminar Institut de Neurobiologie Alfred Fessard, Unité de Recherche N&D Neurobiologie et Développement CNRS UPR 3294, Gif-sur-Yvette, France INVITED TALK: Path integral distance for the data analysis.
03.2014	Energy and Environment Seminar Chalmers University of Technology, Gothenburg, Sweden INVITED TALK: Random remarks about random walks: 4 Sketches for a discussion.
2012-2015	<b>5 talks</b> at the Applied Mathematics Seminar Max-Planck-Institute for Mathematics, Leipzig, Germany
02.2014	Environmental Seminar Nansen International Environmental and Remote Sensing Centre, St. Petersburg, Russia INVITED TALK: Path integral distance for the data analysis.
07.2013	<b>2 talks</b> in Theoretical Organization Models Society Strategic Organization Design, University of Southern Denmark, Odense, Denmark

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	INVITED TALK: Exploration, Exploitation, and Evolution as approached from statistics
03.2013	<b>4 talks</b> in The Interdisciplinary College: Wicked Problems, Complexity and Wisdom Günne, Germany
12.2012	Economics Seminar Marche Polytechnic University, Ancona, Italy INVITED TALK: Markov Chain Analysis of Complex Networks and Databases
12.2012	Seminar in Combinatorics, Graph Theory and Applications Polytechnic University of Catalonia, Barcelona, Spain INVITED TALK: Markov Chain Analysis of Complex Networks and Databases
2012	7 talks during Summer School of Energy & Power Engineering Xi'an Jiaotong University, Xi'an, China
05.2008	Physics Seminar Universidade de Aveiro, Portugal INVITED TALK: Future poverty hiding in cities
1999,2006- 2008	<ul> <li>7 talks at the Université de Provence, Aix-Marseille II, Marseille, France</li> <li>Solid State Physics Seminar (Solid State Physics Department)</li> <li>Applied Mathematics Seminar (Center of Theoretical Physics CNRS UMR 6207)</li> <li>Theoretical Physics Seminar (Center of Theoretical Physics CNRS UMR 6207)</li> <li>Seminar of Applied Mathematics in Genomics (Center of Immunology, CNRS UMR 6102)</li> </ul>
01.2007	Institute National de Recherche en Informatique et en Automatique (INRIA) Rocquencourt, France INVITED TALK: Spectral Analysis of transportation Networks
12.2006	Institut National de Recherche en Informatique et en Automatique (INRIA) Sophia Antipolis, France INVITED TALK: Markov Chain Methods for Analyzing Complex Transport Networks

	Science and Technology Seminar
06 2005	School of Informatics, University of Edinburgh, Scotland, UK
06.2005	INVITED TALK: Stochastic models of gene expression networks
	Applied Mathematics Seminar
	University of Potsdam,
06.2001	Potsdam, Germany
	INVITED TALK: Stochastic models of gene expression networks.
	2 talks in the A. Fock Research Institute of Physics,
	Saint Petersburg State University, Russia
1996, 2001	- Solid State Physics Seminar (Solid State Physics Dept)
	- Theoretical Physics Seminar (Theoretical Physics Department)
	2 talks at the Summer School of Nonlinear Dynamics
	Texas A&M Prairie View,
07.1997	Prairie View, TX
	INVITED TALK: Renormalization Group Approach to Fully Developed Turbulence
	Jefferson Lab Seminar
	CEBAF Center, Jefferson Lab,
12.1996	Newport News, VA
	INVITED TALK: Renormalization Group Approach to Fully Developed Turbulence
	Nonlinear-Physics Physics Seminar
	Department of Physics and Technology, Texas A&M University,
12.1996	College Station, TX
	INVITED TALK: Renormalization Group Approach to Fully Developed Turbulence

### CONFERENCES, WORKSHOPS, AND SEMINARS ORGANIZED AND CONVENED

### A Member of the Scientific Organizing Committee for the Days of Applied

2023 Nonlinearity and Complexity (DANOC) hosted on January 12-14, 2024 by the Aristotle University of Thessaloniki, Greece.

	Charing the Scientific Awards Committee for the Days of Applied Nonlinearity and	
2023	Complexity (DANOC) hosted on January 12-14, 2024 by the Aristotle University	
	of Thessaloniki, Greece.	
2022	A Member of the Award Committee, 2022 3 <sup>rd</sup> Online Conference on Nonlinear Science and Complexity, Sep 26-29, 2022, Aristotle University of Thessaloniki, Greece	
2022	A member of the Scientific Committee, the International Conference on Mathematical Analysis and Applications in Science and Engineering- ICMAS2SC'22, The School of Engineering of the Polytechnic of Porto, on June 27- 29, 2022	
2021	Random Time, Memory, and Fractional Dynamics Weekly International Seminar Fridays 09:00 AM Central Time (US and Canada), 3:00 PM Portugal/ UK, 4:00 PM Spain/France/Germany 5:00 PM Ukraine 5:00 PM Moscow 10:00 PM China <u>https://zoom.us/j/97888288693</u> Program is available at <u>https://www.math.ttu.edu/~dvolchen/seminar.html</u>	
10.2021	An Award Committee member, 2021 2 <sup>nd</sup> Online Conference on Nonlinear Science and Complexity May 26-29, 2021, Polytechnic Institute of Porto, Porto, Portugal	
11.2020	The Session Chair of Invited Speakers Session @ The 1st Online Conference on Nonlinear Dynamics and Complexity, November 23-25, 2020 ( <u>http://ndc.lhscientificpublishing.com/</u> )	
11.2020	The Session Chair of Nonlinear Dynamics and Complexity Session (General)@ The 1st Online Conference on Nonlinear Dynamics and Complexity, November 23- 25, 2020 ( <u>http://ndc.lhscientificpublishing.com/</u> )	
11.2020	The Conference Chair @ The 1st Online Conference on Nonlinear Dynamics and Complexity, November 23-25, 2020 (http://ndc.lhscientificpublishing.com/). comprising a major session and 12 individual symposia operating in many time zones; 200+ participants, Central Time Zone, USA	
05.2019	Emmy Noether High School Mathematics Days XVII Texas Tech University, Lubbock TX The Member of Program Committee; Invited Speaker.	
11.2019	ASME's 2019 International Mechanical Engineering Congress and Exposition	

	Calvin L. Rampton Salt Palace Convention Center in Salt Lake City, Utah The Member of Program Committee; Reviewer
11.2018	ASME's 2018 International Mechanical Engineering Congress and Exposition David L. Lawrence Convention Center Pittsburgh, PA The Member of Program Committee; Reviewer
08.2018	7th International Conference on Nonlinear Science and Complexity San Luis Potosí, México The Member of Program Committee; Invited Speaker.
05.2018	Emmy Noether High School Mathematics Days XVI Texas Tech University, Lubbock TX The Member of Program Committee; Invited Speaker. Poster Session organizer
08.2017	Workshop on Nonlinear Dynamical Systems, Sichuan University of Science and Engineering, Zigong, China, 8- 9 May 2017 The Member of Program Committee; Invited Speaker.
04.2017	II International Conference on Complexity, Future Information Systems and Risk School of Engineering, Polytechnic of Porto, Portugal The Member of International Program Committee; Reviewer
03.2015	Workshop: Quantum Field Theory methods in neuronal networks dynamics Zentrum für Interdisziplinäre Forschung, University of Bielefeld, Germany Funded by the 7th <i>European Framework Programme</i> FP7-ICT-2011-8 Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
10.2013	Workshop: Mathematics of Complex Systems Zentrum für Interdisziplinäre Forschung, University of Bielefeld, Germany Funded by the 7th <i>European Framework Programme</i> FP7-ICT-2011-8 Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
05.2013	Workshop: Mathematics of Multi-level Anticipatory Complex systems Max-Planck-Institute for Mathematics, Leipzig, Germany Funded by the 7th <i>European Framework Programme</i> FP7-ICT-2011-8 Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
10.2012	Workshop: Spectral Methods for Network Analysis

	The joint workshop University of Bielefeld (Germany), Tohoku University (Japan), École polytechnique fédérale de Lausanne (Switzerland) Zentrum für Interdisziplinäre Forschung, University of Bielefeld, Germany
	Convener; The Member of Program Committee; Invited Speaker.
10.2011	Workshop: We Shape Our Buildings; Thereafter They Shape us Max-Planck-Institute for Mathematics, Leipzig, Germany Funded by the 7th <i>European Framework Programme</i> FP7-ICT-2011-8 Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
04.2011	Workshop: Evolution of Human Language, Center of Cognitive Interaction Technology, University of Bielefeld, Germany Sponsored by Wissenschaftliches Zentrum infinity <sup>3</sup> GmbH, D 33613 Bielefeld Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
05.2011	Workshop: Architecture of Human Motor Action: From Kinematics to Cognitive Models Zentrum für Interdisziplinäre Forschung, University of Bielefeld, Germany Sponsored by University of Bielefeld Grant Recipient; Convener; The Member of Program Committee; Invited Speaker.
02.2008	Workshop: Evolution and Structure of Complex Systems and Networks Zentrum für Interdisziplinäre Forschung, University of Bielefeld, Germany Convener; The Member of Program Committee; Invited Speaker.
05.2002	Workshop: On the Gibbs path: a random field trip dedicated to 100-years of the book J. Gibbs "Principles of Statistical Mechanics" Bielefeld University, Germany Convener; The Member of Program Committee; Invited Speaker.

### LABORATORY DEVELOPMENT AND MAINTENANCE

Data Analysis Laboratory for Multi-level Anticipatory Complex systems The Center of Cognitive Interaction Technology,

2013 – 2016 University of Bielefeld, Germany
 Purchased and maintained equipment: Mangold Intl GmbH Portable Observation
 Labs and Software INTERACT
 Supported by EC 7. European Framework Programme ICT-2011.9.7 FET

CURRICULUM VITAE

#### Dynamics of Multi-Level Complex Systems (DyM-CS).

#### FUNDING

#### External Applications, Accepted, Awarded, and Pending

3. Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;
Status: Awarded (A23-0139-001) Prime Account: 210697-E04208-200 (Active)
Title: "Soldier Information Interface for Aviation Fleet Management Tool (FLEETSPACE Integration & Test)"
PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU), Timothy Matis (IMMS TTU)
Amount \$339,969.00.
Duration: Aug 2023 – Jan 2024
Candidate percentage of effort: 5.22% Allocation of Credit: 17%

4. Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;
Status: Awarded (A23-0086-001); Account Number: 210682-E04208-200;
Sponsor Award No: W911W6-17-3-0002 PO 435 CO000
Title: "Data Refinement and Reduction for Aviation Sustainment (DRRAS Phase II)"
PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU), Dongping Du (IMMS TTU)
Amount \$524,971.00.
Duration: Aug 2022 – Jan 2024
Candidate percentage of effort: 30% Allocation of Credit: 25%

Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;
 Status: Awarded (A21-0283-001) ); Account Number: 210577-E04208-200
 Sponsor Award: 412
 Title: Solider Information Interface for Aviation Fleet Management Tool (FLEETSPACE)
 PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU)
 Amount \$308,178.00.

Duration: Aug 2021 – Jul 2022 Candidate percentage of effort: 25%

Prime Sponsor: Department of Defense Army; Sponsor: AVX Aircraft Company;
 Status: Awarded (A20-0218-001); Account Number: 210499-E04214-200
 Title: Maintenance Remaining Useful Life Validator Application for Rotorcraft-Automated
 Component Tracking
 PI: Tommy Dang (CS TTU), Co-PIs: Dimitri Volchenkov, Dy Le (IMMS TTU)
 Amount \$300,000.00.
 Duration: June 2020 – Aug 2021
 Candidate percentage of effort: 10%

 Sponsor: Department of Defense Army Status: Awarded (A20-0080-001); Account Number: 210469-E04208-200 Title: Multi-Source Data Fusion PI: Dimitri Volchenkov, Co-PIs: Tommy Dang (CS TTU), Dy Le (IMMS TTU) Amount \$300,003.00.
 Duration: June 2019 – Oct 2020 Candidate percentage of effort: 45%

#### Pending

- Sponsor: Texas A&M University
   Prime Funding Agency: DOD Office of Naval Research
   Title: "Exploiting Local Complexity to Secure Global Stability and Synchronization" Join
   Project between TAMU and TTU
   PI(s): Steve Suh (TAMU), Dimitri Volchenkov (TTU)
   Proposed Total/TTU Amount: \$1.78M / \$636,812 (TTU)
   Proposed Begin-End Dates: 05/01/2024 04/30/2027
- Sponsor: National Science Foundation Status: Submitted to sponsor - Proposal: 23-0476 Title: "Doctoral Dissertation Research: Developing Campus walkability index with the application of Geo technology and space syntax theory and urban anthropology - Gisou Salkhi (PhD Graduate Student) "

PI(s): **Dimitri Volchenkov**, Gisou Salkhi Proposed Total Amount: \$37,431.00 Proposed Begin-End Dates: 9/01/2023 - 8/31/2024

#### **Internal Applications**

None.

#### **External Applications Declined**

1. Sponsor: United States Department of Homeland Security

Status: Not Funded

Title: Forecasting Domestic Terrorism: Using Hate Crime Incidents Clusters to Identify

Potential Domestic Terrorism Organizations Activity

PI: Ori Swed (SASW TTU); Co-PIs: Dimitri Volchenkov, Tommy Dang (CS TTU)

Amount \$411,758.00.

Duration: Oct 2020 – Sep 2022

Candidate percentage of effort: 45%

2. Sponsor: DHHS, National Institutes of Health

Status: Not Funded

Title: Data Science to Uncover Deep Structures and Sustainable Health Solutions

PI: Stephen Ekwaro-Osire (ME TTU); Co-PIs: Dimitri Volchenkov, Victor Sheng (CS TTU),

Queen, Courtney M (TTUHSC), Gittner, Lisa (TTUHSC)

Amount \$1,749,322.00.

Duration: May 2021 – Apr 2022

Candidate percentage of effort: 15%

3. Sponsor: NSFStatus: Not FundedTitle: SenSE: Early Diagnostics of ADHD among Children with Multimodal Sensors

PI: Victor Sheng (CS TTU); Co-PIs: Dimitri Volchenkov, Changzhi Li (Electrical and Computer Engr) Amount \$749,999.00. Duration: Dec 2020 – Nov 2023 Candidate percentage of effort: 20%

4. Sponsor: NSF
Status: Not Funded
Title: ATD: Deep Learning for Predicting Political Coercive Violence Around Election Periods
Across Africa
PI: Dimitri Volchenkov, Co-PIs: Ori Swed (SASW TTU), Tommy Dang (CS TTU)
Amount \$749,999.00.
Duration: Oct 2020 – Sep 2023
Candidate percentage of effort: 34%

5. Sponsor: NSF
Status: Not Funded
Title: AI Institute: Planning: A Research and Practice Hub of Self-Aware Data
PI: Victor Sheng (CS TTU); Co-PIs: Dimitri Volchenkov, Fang Jin (CS TTU), Changzhi Li
(CS TTU), Akbar Siami Namin (CS TTU), Shuo Yu (Dept: Business, Dean Ofc), David Gutman
(Industrial Engineering), Delong Zuo (Civil, Env and Construc Engr), Chris Chu (Public
Relations), David Weindorf (VP Research)
Amount \$499,770.00.
Duration: Aug 2020 – July 2022
Candidate percentage of effort: 34%

6. Sponsor: NSF
Status: Not Funded
Title: HDR TRIPODS: Bidirectional Data Collection and Data Science
PI: Ranadip Pal (Electrical and Computer Engr); Co-PIs: Dimitri Volchenkov, Souparno Ghosh (Mathematics and Statistics), Changzhi Li (Electrical and Computer Engr), Ariful Islam (CS)

TTU), Yong Chen (CS TTU), Delong Zuo (Civil, Env and Construc Engr), Barb Moskal (CISER) Amount \$1,499,999.00. Duration: Jan 2020 – Dec 2022 Candidate percentage of effort: 15%

7. Sponsor: Texas Department of Transportation
Status: Old
Title: Exploring the Use of Artificial Intelligence to Leverage TxDOT Data for Enhanced
Corridor Management and Operations
PI: Ali Nejat (Civil, Env and Construc Engr); Co-PIs: Dimitri Volchenkov, Hongchao Liu
(Civil, Env and Construc Engr), Tommy Dang (CS TTU)
Amount \$102,348.00.
Duration: May 2019 – May 2020
Candidate percentage of effort: 20%

Status: Old
Title: ADT: From Hate Speech to Hate Crime: Phase Space Embedding and Multiscale
Geometric Data Fusion
PI: Dimitri Volchenkov, Co-PIs: Ori Swed (SASW TTU), Tommy Dang (CS TTU)
Amount \$293,871.00.
Duration: Oct 2019 – Sep 2021
Candidate percentage of effort: 34%

9. Sponsor: Sentient Science, DOD - Defense Advanced Research Projects Agency Status: Old
Title: Physics of Artificial Intelligence
PI: Dy Le (IMMS TTU), Co-PI: Dimitri Volchenkov
Amount \$408,896.00.
Duration: Sep 2018 – Mar 2020
Candidate percentage of effort: 50%

8. Sponsor: NSF

10. Sponsor: NSF
Status: Not funded
Title: BIGDATA: IA: Aviation Big Data Platform for Human-Machine Longevity Sustainment (HuMaLoS)
PI: Dimitri Volchenkov, Co-PI: Dy Le (IMMS TTU)
Amount \$1,908,269.00.
Duration: Oct 2018 – Sep 2022
Candidate percentage of effort: 50%

11. Sponsor: NSF

Status: Not funded

Title: ATD: Accelerating Migration Flow and Related Threats Evaluated by Dynamic Pricing Theory

PI: Dimitri Volchenkov, Co-PI: Akif Ibraguimov (Mathematics and Statistics), Svetlozar Rachev (Mathematics and Statistics), Eugenio Aulisa (Mathematics and Statistics), Cristina Bradatan (Sociology, Anthro and Social W), Yiyuan Tang (Psychological Sciences), Fang Jin (Computer Science) Amount \$265,071.00. Duration: Oct 2018 – Sep 2019

Candidate percentage of effort: 40%

## IV. SERVICE

#### **Outreach and Engagement**

University of Kelaniya Sri Lanka Webinar on Promoting Research among Undergraduates, 70 Participants, SLAAS and the Department of Mathematics, University of Kelaniya conducted a webinar on promoting research among undergraduates with Prof. Dimitri Volchenkov and Dr. Pushpi Paranamana on March 22, 2023. The main objective of this webinar is to promote research culture among undergraduate students with Mathematics/Statistics backgrounds and to encourage them to pursue higher studies. Organized by Prof. Thilini Mahanama, Sujeewa de Silva <a href="https://youtu.be/yfBbvhkCgLY">https://youtu.be/yfBbvhkCgLY</a>

#### **Departmental Service**

09/2023	Dept Math & Stats, Texas Tech University AI and ML Active Group Faculty Meeting Topic: "AI Machine Learning Curriculum in Math and Stats" Participants: Toda, Magdalena; Thompson, Travis; Huang, Juntao; Howle, Victoria; Long, Katharine; Juan, Lourdes, Monico, Chris; Volchenkov, Dimitri; Guo, Weimath; Tomas, Ignacio; Trindade, Alex
Spring 2022 – Present	Departmental grant proposals reviewer and authorizer
Fall 2020 – Present	Faculty Resource Committee Member
January 2022	Evaluation of Dr. Pouliasis', 3 <sup>rd</sup> year review committee member
Fall 2018-Spring 2019	Faculty Hiring Committee Member
10.2018	VTA Evaluation of Mr. Kara Erdi (Math 1331)
10.2018	VTA Evaluation of Mr. Dylan Rudy (Math 3310)
10.2017	VTA Evaluation of Mr. Mohammad Mihrab Uddin Chowdhury (Math 1331)
10.2017	VTA Evaluation of Mrs. Ma, ZhuanZhuan (Math 1320-032)
Fall 2018	Course Coordination MATH 1331: Introductory Mathematical Analysis II (5 sections); Common Final exam preparation TA/GPTI's Supervised: <i>Xu, Dong</i> (R11416884); <i>Alhassan,</i> <i>Ameen Abdulalmohsin H</i> (R11317913); <i>Zhai, Qiannan</i> (R11457409); <i>Williams, Margaret</i> (R00518708); <i>Hu, Yuan</i> (R11474135)
Spring 2019	Course Coordination MATH 1331: Introductory Mathematical Analysis II (14 sections); Common Final exam preparation TA/GPTI's Supervised: <i>Xu, Dong</i> (R11416884); <i>Imiya</i> <i>Mohottige, Lakmini Nadeesha Jayaweera</i> (R11464594); <i>Zhai,</i> <i>Qiannan</i> (R11457409); <i>Wang, Jennifer D</i> (R10401587);

	Gonapeenuwala Vithana, Rohana Kumara (R11505008); Pangeni, Sangam (R11501205); Teng, Ying (R11439933); Dassanayake, Isuru Dilan (R11477224); Mukta, Farjana Tasnim (R11572031); Long, Cole (R11537176); Ema, Jannatul Ferdous (R11565029); Alhassan, Ameen Abdulalmohsin H (R11317913); Williams, Margaret (R00518708); Hu, Yuan (R11474135)
Fall 2019	Course Coordination MATH 1331: Introductory Mathematical Analysis II (7 sections); Common Final exam preparation TA/GPTI's Supervised: <i>Wang, Jennifer D</i> (R10401587); <i>Nguyen, Phuong</i> (R11645839); <i>Kesawan, Ramesh Aravind</i> (R11478881); <i>Pinto Jayawardena,</i> <i>Hettiarachchige Sithma</i> (R11593321); <i>Ratnayake, Kusal</i> (R11565486); <i>Williams, Margaret</i> (R00518708)
Spring 2020	Course Coordination MATH 1331: Introductory Mathematical Analysis II (15 sections); Common Final exam preparation TA/GPTI's Supervised (12): <i>Mukta, Farjana Tasnim;</i> <i>Balasuriya, Balasuriya Mudiyanselage; Devage Dona,</i> <i>Dulanjalee Long, Cole; Pinto Jayawardena; Hettiarachchige</i> <i>Sithma Dao; Mai Huynh Phuong Ratnayake; Kusal</i> <i>Gonapeenuwala Vithana; Rohana Kumara; Williams, Margaret;</i> <i>Perera, Dewamullage Chathuri; Mills, Casey; Jayarathne,</i> <i>Diyunugalage; Gajith Neranjaka</i>
Summer 2020	Course Coordination MATH 1331: Introductory Mathematical Analysis II (6 sections); Common Final exam preparation TA/GPTI's Supervised (5): <i>Mills, Casey J; Almeida,</i> <i>Shamonvenishiya; Perera, Nuwanthika; Vithana, Rohana</i> <i>Kumara; Chen, Fan</i>
Spring 2021	Course Coordination MATH 1331: Introductory Mathematical Analysis II (16 sections); Common Final exam preparation TA/GPTI's Supervised (12): <i>Mills, Casey; Greywall, Kyle;</i> <i>Liang, Chuan; Devage Dona, Dulanjalee; Rejuan, Rifat;</i> <i>Balasuriya, Balasuriya Mudiyanselage; Erwin, Brock;</i> <i>Mudunkotuwa Appuhamilage, Geethanjalee; Francese, James;</i> <i>Rathnayake, Kusal; Pinto Jayawardena, Hettiarachchige Sithma;</i> <i>Chakroborty, Sajal</i>

## **College Service**

Member of the Mentor Network Participants Group Outreach and Engagement Mentorship Network Texas Tech University Spring 2022 - Present

10/2023 LPMD affiliates meeting on LPMD Doctoral Degree Curriculum: Core Courses & Tracks, at the Texas Tech University Graduate School, Interdisciplinary Studies Mon 10/23/2023 3:30 PM - 4:30 PM Stone-Lawrence, Susan; Nejat Ali, Ghebrab, Tewodros; Cricchio, Anthony; Mostafavi, Sina; Haq, Saif; Li, Wei; Greenhalgh-Spencer, Heather; Park, Kuhn; Qiu, Lingyi; Monsur, Muntazar; Salazar-Bravo, J; Perry, Gad; Gaines, Kristi; Bernard, Eric; Sikes, Carmen; Portillo, Carlos; Ellis, Clifton; Turturo, David; Zugay, Brian; Mehan, Asma; Volchenkov, Dimitri

#### Graduate Dean's Representative

Zulfiqar Ali Khan, M.S October 2022 Department of Electrical and Computer Engineering, TTU Dissertation Title: "Novel Vulnerability Detection Techniques for Ethereum-based Smart Contracts" Dr. Akbar Siami-Namin (Chair) Dr. Yu Zhuang, Dr. Susan A. Mengel, Dr. Tommy Dang, Dr. Dimitri Volchenkov (Dean's Representative), Dr. Mark A. Sheridan (Dean of the Graduate School)

Huyen Nguyen, Ph.D. Candidate in Computer Science, June 2023 Department of Electrical and Computer Engineering, Texas Tech University Dissertation Title: "Interactive Visualization and Event Detection in Time-series Data" Committee Members: Dr. Tommy Dang (Chair), Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Dimitri Volchenkov (Dean's Representative)

Andrea Arriet, M.S, B.S, Ph.D. Candidate in Computer Science,June 2023Department of Electrical and Computer Engineering, Texas Tech UniversityJune 2023Dissertation Title: "Water Management Policies for the Energy Sector for North America"Committee Members: Dr. Timothy Matis (Chair), Dr. Felipe Feijoo, Dr. Dongping Du, Dr.Hamidreza Validi, Dr. Dimitri Volchenkov (Dean's Representative)June 2023

Luis Felipe Gutiérrez, M.S, B.S, Ph.D. Candidate in Computer Science March 2023 Department of Electrical and Computer Engineering, TTU Dissertation Title: "Enabling Context-Aware Natural Language Processing: From Dense Vector Representations to Contextual Features" Committee Members: Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Bashir I. Morsh, Dr. Dimitri Volchenkov (Dean's Representative)

Faranak Abri, M.S, B.SJune 2022Department of Electrical and Computer Engineering, TTUDissertation Title: "Content Analysis and Modeling Interactions in Social Engineering Attacks"Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Bashir I. Morshed, Dr.Sumaiya Shomaji, Dr. Dimitri Volchenkov (Dean's Representative), Dr. Mark A. Sheridan (Dean of the Graduate School)

Datta, Prerit June 2021 Department of Electrical and Computer Engineering, TTU Dissertation Title: "XXXX" Dr. Akbar Siami-Namin (Chair) Dr. Keith S. Jones, Dr. Susan Mengel, Dr. Bashir I. Morshed, Dr. Sumaiya Shomaji, Dr. Dimitri Volchenkov (Dean's Representative), Dr. Mark A. Sheridan (Dean of the Graduate School)

Daniel Fernando Rodriguez February 2022 Electrical Engineering, TTU Dissertation Title: "Low-Cost Far-field and Near-field Radio Frequency Sensors for Human Sensing and Liquid Characterization" Committee members: Changzhi Li (chair), Stephen Bayne, Mahammad Saed, Dimitri Volchenkov (Dean's Representative)

Binod Rajbhandari Oct 2020 Department of Physics and Astronomy, TTU Dissertation Title: First Search for Gravitational Waves from R-modes of the Crab Pulsar Committee Members: Benjamin Owen (chair), Joseph D. Romano, Dimitri Volchenkov, Alessandra Corsi, David Ian Jones, Mark Sheridan

Raziur RahmanJune 2019Department of Electrical and Computer Engineering, TTUDissertation Title: Anti-cancer Drug Sensitivity Predictive Modeling for Improvement of PrecisionMedicine using Machine Learning AlgorithmsCommittee Members: Ranadip Pal (chair), Dimitri Volchenkov (Dean's Representative), SunandaMitra, Souparno Ghosh

Mahdi Ramezanian Nov 2019 Department of Petroleum Engineering, TTU Dissertation Title: An experimental study to investigate the effect of temperature and pressure on a modified design of gravel packing with oil swelling rubber particles and unconventional rock properties. Committee Members: Heinze Lloyd (chair), Emadibaladehi H., Sheldon Gorell, Dimitri Volchenkov (Dean's Representative)

Academic Recommendation Letters

CURRICULUM VITAE

	Florida International University
	Department of Math and Statistical Sciences
01/2024	Position: Open Rank Teaching Professor
	Applicant: G M Fahad Bin Mostafa
	University of Texas Rio Grande Valley (UTRGV)
	The School of Mathematical and Statistical Sciences (SMSS)
	Position: Assistant Professor in the College of Sciences/School of Mathematical
01/2024	and Statistical Sciences, College of Sciences / Mathematical and Statistical
	Sciences
	Applicant: G M Fahad Bin Mostafa
	Clemson University
	Clemson Center for Public Health Modeling and Response
	Department of Public Health Sciences
01/2024	College of Behavioral Social and Health Sciences
	A phone discussion with Dr Lior Rennert on the candidate
	Candidate: G M Fahad Bin Mostafa
	The Texas Tech University
01/0004	TTU Continuing Students Scholarship 2024-25
01/2024	Applicant: Elizabeth Payton
	Illinois Institute of Technology,
	Department of Applied Mathematics,
12/2023	Position: Professor of Mathematics, Tenure
	Applicant: Dr Vitali Vougalter
	The University of Alabama at Birmingham,
12/2023	School of Public Health
	Position: Open Rank/Tenure Faculty Position - Biostatistics

	Applicant: G M Fahad Bin Mostafa
	The Ohio State University,
12/2023	Position: Visiting Assistant Professor of Biostatistics
	Applicant: G M Fahad Bin Mostafa
	The Texas Tech University
12/2022	Summer Thesis/Dissertation Research Award Scholarship for 2024
12/2023	Applicant: Dona, Charu Sameera Devindi
	Stony Brook University Graduate School,
	Applied Math & Stat PhD program,
12/2023	Applicant: Akash Deep, Interdisciplinary Studies MSc
	The University of Texas at Dallas
	Department of Mathematical Sciences within the School of Natural Sciences and
11/2022	Mathematics (NSM)
11/2023	Position: Assistant Professor - Mathematics, Statistics, Data Science
	Applicant: Dona, Charu Sameera Devindi
	The College of William & Mary
	Department of Mathematics
11/2023	Assistant Teaching Professor of Mathematics
	Applicant: Indika Gihan Gunawardana Ilandari Dewage
	Murray State University
	Department of Statistics
11/2023	Position: Assistant Professor, Statistics
	Applicant: Dona, Charu Sameera Devindi
11/2023	University of Wisconsin-Madison
11/2023	

	College of Letters & Science, Department of Statistics
	Position: Assistant Professor, Associate Professor, Professor in Statistics
	Applicant: Dona, Charu Sameera Devindi
	The University of North Carolina at Chapel Hill
	Department of Statistics,
11/2023	Position: Post Doctoral Scholar
	Applicant: G M Fahad Bin Mostafa
	Ohio Northern University
	Department of Mathematics,
11/2023	Position: Assistant Professor of Mathematics, Tenure Track
	Applicant: Dr Vitali Vougalter
	Stockton University
	Department of Mathematics,
11/2023	Position: Assistant Professor of Mathematics, Tenure Track
	Applicant: Dr Vitali Vougalter
	University Wisconsin Madison,
	Department of International Studies/Geography
11/2023	Position: Assistant Professor of Geography, Tenure Track
	Applicant: Gisou Salkhi Khasraghi
	Virginia Tech,
	Department of Mathematics,
11/2023	Position: Assistant Professor in Mathematical Physics, Tenure Track
	Applicant: Dr Vitali Vougalter
10/2022	University of California, Riverside
10/2023	College of Natural & Agricultural Sciences,

	Department of Statistics,
	Position: Assistant Professor of Teaching in Statistics
	Applicant: G M Fahad Bin Mostafa
	MathJobs.Org
10/2023	Assistant Professor of Statistics
10/2023	Applicant: G M Fahad Bin Mostafa
	MathJobs.Org
10/2022	Assistant Professor of Statistics
10/2023	Applicant: Indika Gihan Gunawardana Ilandari Dewage
	Texas Tech University
	Graduate School, Ph D Program in Mathematics
10/2023	Applicant: Ms Akash Deep
	University of Missouri-Kansas City
	Graduate School, Ph D Program in Interdisciplinary Studies
10/2023	Applicant: Ms Akash Deep
	Princeton University
	Graduate School, Ph D Program in Mathematics
10/2023	Applicant: Ms Akash Deep
	University of California, San Diego
	MATHEMATICS - Physical Sciences department
10/2023	Assoc/ Full Professor of Mathematics
	Applicant: Dr Vitali Vougalter
10/2022	University of Colorado, Boulder
10/2023	Mathematics department

	Assistant Professor of Mathematics
	Applicant: Dr Vitali Vougalter
	University of California, Irvine
	Mathematics department
10/2023	Assistant Professor of Mathematics - Open Areas
	Applicant: Dr Vitali Vougalter
	National Science Foundation
	Graduate Research Fellowship Program (GRFP)
	Project: "Optimizing Machine Learning Methods and Artificial Intelligence in
10/2023	Survival Prediction and Treatment Selection of Lung Cancer"
	Applicant: Clayton C. Paget
	School of Earth, Society & Environment, Urbana, Illinois
	Department of Geography & GIS,
10/2023	Position: Assistant Professor
	Applicant: Gisou Khasraghi
	AcademicJobsOnline.Org
	Academic Recommendation Letter
10/2023	On behalf of MS Fahad Mostafa, Texas Tech University
	Virginia Tech
	Department of Mathematics
10/2023	Position: Assistant Professor of Mathematics
10/2023	Applicant: Dr Vitali Vougalter
	Typhound Di Tiuni Touguloi
	United States Citizenship and Immigration Services,
09/2023	An academic support letter for the EB1-B Application,
	Outstanding Professor or Researcher,

	Applicant: Dr. Zhuanzhuan Ma
09/2023	MathJobs.org Academic Recommendation Letter On behalf of MS Fahad Mostafa, Texas Tech University
09/2023	MathJobs.org Academic Recommendation Letter On behalf of Dr Vitali Vougalter, University of Toronto
09/2023	Texas Tech University Charles S. Peirce's Interdisciplinary Graduate Fellowship Program Applicant: Dona, Charu Sameera Devindi
07/2023	Center for Biologics Evaluation and Research, US Food and Drug Administration, Applicant: Dr Yawei Cheng Position: Mathematical statistician
06.2023	Texas Tech University The Geography (MS) Program for the Fall 2023 Applicant: Gisou Salkhi Khasraghi
04.2023	The University of Texas at Dallas The Department of Computer Science in the Erik Jonsson School of Engineering and Computer Science Position: Assistant Professor Applicant: Shuvalaxmi Dass
04/2023	United States Citizenship and Immigration Services,

	A Letter of Endorsement
	EB1A Petition for Alien Workers as a Person of Extraordinary Ability in the
	sciences, EB-1(a)
	Applicant: Dr. Yevgeny Redeonychev.
	United States Citizenship and Immigration Services,
	A Letter of Support
	EB1B Green Card Application
04/2023	Applicant: Dr. Zhuanzhuan Ma, a tenure-track Assistant Professor of Statistics at
	the School of Mathematical and Statistical Sciences, University of Texas Rio
	Grande Valley (UTRGV)
	Texas Tech University
	Position: The Paul Whitfield Horn Fellowship for Women 2023 -2024
03/2023	Applicant: Ms Seneviratne, Himali
	Academic Recommendation Letter
	The Moody School of Graduate and Advanced Studies - SMU, Graduate School
	Position: MSCS Candidate
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	The City College of New York, Structural Engineering
	Position: Full Professor
02/2023	Applicant: Hansong Tang
	Academic Promotion Recommendation Letter
	University of Texas at Dallas, Graduate School
00/2022	Position: Computer Science – MSCS Candidate
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter

	University of Texas at Dallas, Graduate School
	Position: Statistics - MS Candidate
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	Texas Tech University
	Position: Helen DeVitt Jones Excellence in Graduate Teaching Awards 2023
02/2023	Applicant: Syed Ehsan Ar Rafi
	Academic Nomination Letter
	Duke University, Graduate School
	Position: PhD Candidate
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	Brandeis University, Graduate School of Arts and Sciences
	Position: PhD Candidate
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	Cleveland State University, Electrical Engineering and Computer Science
	Position: Assistant Professor in Computer Science
02/2023	Applicant: Shuvalaxmi Dass
	Academic Recommendation Letter
02/2023	University of Texas at Dallas
	Master of Science in Computer Science
	Applicant: Anna Solodukhina
	Academic Recommendation Letter

02/2023	University of Texas at Dallas
	Master of Science in Statistics
	Applicant: Anna Solodukhina
	Academic Recommendation Letter
02/2023	Duke University Graduate School
	Graduate Programs in Electrical and Computer Engineering
	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	Texas Tech University
	Helen DeVitt Jones Excellence in Graduate Teaching Awards Committee
02/2023	Nominee: Rafi, Syed Ehsan Ar, Grad Part-Time InstructorMathematics and Statistics Academic Nomination Letter
	Duke University Graduate School
	Graduate Programs in Economics and Computation
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	Graduate School of Arts and Sciences at Brandeis University
	Graduate Programs in Computer Science
02/2023	Applicant: Anna Solodukhina
	Academic Recommendation Letter
	The East Bay campus of California State University system
	Position: Assistant or Associate Professor of Computer Science position
01/2023	Applicant: Shuvalaxmi Dass
	Academic Recommendation Letter
01/2023	University California, Santa Barbara, Computer Science Department

CURRICULUM VITAE

	Position: Computer Science Open Level Tenure-Track or Tenured Position
	Applicant: Shuvalaxmi Dass
	Academic Recommendation Letter
	Johns Hopkins University, Mathematics Department
	Position: Senior Lecturer Mathematics
01/2023	Applicant: Karunaratne, Dulanjalee Damitha, PhD Candidate Mathematics & Statistics, TTU
	Niagara University, Mathematics Department
	Position: Assistant Professor Mathematics, Tenure-Track
01/2023	Applicant: Karunaratne, Dulanjalee Damitha, PhD Candidate Mathematics & Statistics, TTU
	MathJobs.Org
	A general recommendation Letter
01/2023	Applicant: Karunaratne, Dulanjalee Damitha, PhD Candidate Mathematics &
	Statistics, TTU
	Texas Tech University
12/2022	Fall 2023 - Business Administration - Finance, PhD Program
12/2022	Applicant: Chuan Liang, MS Mathematics & Statistics
	University of Southern California
	Position: Open Rank -Assistant and Associate/Full Professor of Electrical and
11/2022	Computer Engineering
	Applicant: Shuvalaxmi Dass
	University of Texas at Arlington
11/2022	Position: Open Rank -Assistant and Associate/Full Professor-Computer Science
	and Engineering

#### Applicant: Shuvalaxmi Dass

- 10/2022 The University of Texas at Dallas.Mechanical Engineering Department,Assistant Professor positionApplicant: Dr. Siyu Guo
- 10/2022 Harbin Institute of Technology, China.
   Mechanical Engineering Department,
   Assistant Professor position
   Applicant: Dr. Siyu Guo
- 10/2022Microsoft Corporation,<br/>Cambridge, MA<br/>Research Intern Position in Machine Learning, Statistics, and AutoML<br/>Applicant: Hettiarachchige Sithma Pinto Jayawardena

# 10/2022 USCIS

A recommendation/ Evaluation letter for the O-1 Visa: Individuals with Extraordinary Ability or Achievement Applicant: Dr. Anton Kozhukhov

- 10/2022 Interfolio.com
   A recommendation/ Evaluation letter for the positions in Social and Political
   Sciences
   Applicant: Dr. Ori Swed (SASW TTU)
- 09.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship Program Spring 2023 Applicant: Indika Gihan Gunawardana Ilandari Dewage

09.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship application, Spring 2023 Applicant: Dona, Charu Sameera Devindi

09.2022 Texas Tech University Position of the Associate Vice President for Innovation and Entrepreneurship Applicant: Prof. Dr. Vakhtang Putkaradze, Centennial Professor at the Department of Mathematical and Statistical Sciences, the University of Alberta, CA and the Vice President, Transformation, Science and Technology at ATCO (https://www.atco.com/en-ca.html)

- 09.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship application, Spring 2023 Applicant: Himali Sakunthala Kalanchige
- 05.2022 Texas Tech University Texas Tech University Accelerated 150 hour BS/MS Program Applicant: Johnathon St. Andre
- 04/2022 School of Aerospace Engineering of Xi'an Jiaotong University, China. The "Young and Excellent Talents" Program Assistant Professor position Applicant: Dr. Siyu Guo
- 04.2022 Johns Hopkins Biostatistics Center (JHBC) Quantitative Methods Core, Institute for Clinical and Translational Research Department of Biostatistics Johns Hopkins Bloomberg School of Public Health A research associate non-tenure track faculty position in the Biostatistics Center Applicant: Ahmed Sabit

- 04.2022 Texas Tech University College of Art and Science College of Art and Science Staff Award A Letter of Support on behalf of Ms. Betty Ann Thomas
- 03.2022 Texas Tech University Department of Mathematics and Statistics The SIAM graduate scholarship 2022-2023 Applicant: Kusal Rathnayake
- 03.2022 Texas Tech University Department of Mathematics and Statistics The SIAM graduate scholarship 2022-2023 Applicant: Hettiarachchige Sithma Pinto Jayawardena
- 03.2022 Texas Tech University 2022 Paul Whitfield Horn Fellowship for women Applicant: Himali Sakunthala Kalanchige
- 02.2022 Texas Tech University Texas Tech University Accelerated 150 hour BS/MS Program Applicant: Anna Solodukhina
- 02.2022 Texas Tech University Office of International Affairs Buena Vista Study Abroad Scholarship 2022 Applicant: Elisabeth Grace Larvin
- 02.2022 Academic Programs International (API) API Abroad Program

Internship in Madrid, Spain Applicant: Joseph Luis Salas Rivas

- 02.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship application, Summer 2022 Applicant: Elisabeth Grace Larvin
- 02.2022 The Franklin Institute The Franklin Institute Awards 2023 Bower Award and Prize for Achievement in Science A Letter of Support on behalf of Professor Dr. Albert C. J. Luo
- 02.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship application, Fall 2022 Applicant: Himali Sakunthala Kalanchige
- 02.2022 Texas Tech University Office of International Affairs Study Abroad Competitive Scholarship application, Summer 2022 Applicant: Himali Sakunthala Kalanchige
- 02.2022 Bowling Green State University Firelands College Natural and Social Sciences Department Assistant Teaching Professor Mathematics of the Pathway Program Applicant: Applicant: Sachith Dassanayaka
- 02.2022 Texas Tech University Office of International Affairs

	Study Abroad Competitive Scholarship application, Fall 2022
	Applicant: Hettiarachchige Sithma Pinto Jayawardena
02.2022	Texas Tech University
	Office of International Affairs
	Study Abroad Competitive Scholarship application, Fall 2022
	Applicant: Kusal Rathnayake
01.2022	Texas Tech University
	Office of International Affairs
	Study Abroad Competitive Scholarship application, Summer 2022
	Applicant: Kusal Rathnayake
01.2022	Texas Tech University
	Department of Mathematics and Statistics
	Peer Review Evaluation for the Years 2019-2021
	Applicant: Dr. Stamatis Pouliasis
01.2022	University of Kelaniya Sri Lanka,
	Senior Lecturer Gr. II Position
	Applicant: Dr. (Ms.) K.R.T.V. Mahanama
01.2022	Goucher College
	College of Arts and Sciences
	Assistant Professor, Integrative Data Analytics
	Applicant: Sachith Dassanayaka
01.2022	Oberlin College & Conservatory
	College of Arts and Sciences
	Visiting Assistant Professor in Data Science (2 year appointment)
	Applicant: Sachith Dassanayaka

- 01.2022 State University of New York at New Paltz Department of Mathematics Assistant Professor of Mathematics Applicant: Sachith Dassanayaka
- 01.2022 University of Northern Colorado Department: Applied Statistics & Research Methods Assistant/Associate Professor of Statistics, Tenure Track Applicant: Sachith Dassanayaka
- 01.2022 Whitman College Assistant Professor of Mathematics & Statistics Mathematics and Statistics Department Applicant: Sachith Dassanayaka
- 01.2022 Texas Tech University Office of International Affairs International Study Abroad Competitive Scholarship (SACS) application Applicant: Charu Sameera Devindi Rajapaksha Pathiranage Dona
- 01.2022 SkillSurvey Reference<sup>™</sup> system Pre-Hire 360® workflow Applicant: Sachith Dassanayaka
- 01.2022 Dickinson College The Department of Mathematics and Computer Science Visiting Lecturer in Mathematics Applicant: Sachith Dassanayaka
- 01.2022 Oregon State University

The Department of Statistics Tenure-track Assistant Professor Applicant: Sachith Dassanayaka

- 01.2022 The University of Texas Rio Grande Valley Mathematics and Statistics Department Assistant Professor of Statistics Applicant: Zhuanzhuan Ma
- 01.2022 SUNY Oswego Mathematics and Statistics Department Assistant Professor of Mathematics Applicant: Sachith Dassanayaka
- 01.2022 Ohio Northern University, Mathematics and Statistics Department Assistant Professor of Mathematics (non-tenure track) Applicant: Sachith Dassanayaka
- 01.2022 Southern Illinois University Edwardsville, Mathematics and Statistics Department Assistant Professor (Mathematics and Statistics) Applicant: Sachith Dassanayaka
- 01.2022 Graduate Women in Science (GWIS) National Fellowship Program Applicant: Yunting Gao
- 01.2022 Southern Illinois University Mathematics and Statistical Sciences Assistant/Associate Professor - Statistics

### Applicant: Sachith Dassanayaka

- 01.2022 Weber State University Department of Mathematics Assistant Professor - Mathematics Applicant: Sachith Dassanayaka
- 12.2021 University of California, San Diego
   Halicioglu Data Science Inst
   Assistant Professor Data Systems and Infrastructure (HDSI)
   Applicant: Sachith Dassanayaka
- 12.2021 Rutgers University -New Brunswick
   Department of Statistics, School of Arts & Sciences
   Full Time non-Tenure-Track Faculty Position Mathematics
   Applicant: Sachith Dassanayaka
- 12.2021 University of GeorgiaAssistant Professor in Infectious Disease Modeling and Forecasting positionApplicant: Sachith Dassanayaka
- 12.2021 AcademicJobsOnline.OrgA recommendation letter for the positions in Mathematics and Data AnalysisApplicant: Sachith Dassanayaka
- 12.2021 University of North Carolina at Chapel Hill, Department of Statistics & Operations Research Teaching Assistant Professor Applicant: Sachith Dassanayaka
- 12.2021 Winston-Salem State University

Tenure-Track Assistant/Associate Professor of Mathematics Applicant: Sachith Dassanayaka

- 12.2021 Villanova University Assistant Teaching Professor in Statistics Applicant: Sachith Dassanayaka
- 12.2021 University of Georgia
   Department of Statistics
   Assistant Professor in The Area Of Statistical Data Science
   Applicant: Sachith Dassanayaka
- 12.2021 University of California
   Department of Statistics and Applied Probability
   Open-Rank Teaching Professor in Statistics & Data Science
   Applicant: Sachith Dassanayaka
- 12.2021 University of Massachusetts
   Mathematical Sciences department
   Assistant Professor of Mathematics Statistics
   Applicant: Sachith Dassanayaka
- 12.2021 The State University of New York College at Geneseo
   The Department of Mathematics
   Lecturer in Mathematics
   Applicant: Sachith Dassanayaka
- 12.2021 Western Michigan University
   The Department of Mathematics
   Assistant Professor, Statistics (tenure-track)
   Applicant: Sachith Dassanayaka

- 12.2021 Texas Tech University Student Financial Aid and Scholarships Applicant: Odin Schneider
- 12.2021 Texas Tech University Student Financial Aid and Scholarships Applicant: Kayla Spencer
- 12.2021 University of San Francisco
   Mathematics & Statistics
   Assistant Professor, Tenure-Track
   Applicant: Sachith Dassanayaka
- 12.2021 University of San Francisco
   Master of Science in Data Science Program
   Assistant Professor, Tenure-Track
   Applicant: Sachith Dassanayaka
- Southern Illinois University
   School of Mathematics and Statistical Sciences
   Assistant Professor, Tenure-Track
   Applicant: Zhuanzhuan Ma
- 12.2021 Interfolio.com A recommendation letter for the positions in Mathematics and Statistics Applicant: Zhuanzhuan Ma
- 12.2021 Duquesne University of the Holy SpiritAssistant Professor of Statistics/Data ScienceApplicant: Zhuanzhuan Ma

12.2021 Clarkson University
 School of Mathematics and Statistical Sciences
 Assistant Professor of Statistics/Data Science
 Applicant: Sachith Dassanayaka

- 12.2021 Auburn University
   The Department of Mathematics and Statistics
   Assistant Professor in Statistics/Data Science
   Applicant: Sachith Dassanayaka
- 11.2021 New Mexico State University
   Department of Economics, Applied Statistics, & International Business
   Assistant Professor in Applied Statistics position
   Applicant: Zhuanzhuan Ma
- 11.2021 Adelphi University Manhattan Center
   The Department of Mathematics and Statistics
   Assistant Professor, Statistics (tenure-track)
   Applicant: Sachith Dassanayaka
- 11.2021 Oakland University
   The Department of Mathematics and Statistics
   Assistant Professor of Statistics
   Applicant: Sachith Dassanayaka
- 11.2021 Colorado College
   Department of Mathematics and Computer Science,
   Visiting Assistant Professor, Mathematics and Computer Science
   Applicant: Sachith Dassanayaka

- 11.2021 Iowa State University
   The Department of Mathematics and Statistics
   Assistant Professor in Statistical Machine Learning and Data Science
   Applicant: Sachith Dassanayaka
- 11.2021 Winthrop University
   The Department of Mathematics and Statistics
   Assistant Professor of Mathematics
   Applicant: Sachith Dassanayaka
- 11.2021 Colorado State University
   The Department of Statistics
   Tenure-track Assistant Professor position
   Applicant: Zhuanzhuan Ma

University of Arkansas

- 11.2021 The Department of Mathematics and Statistics Assistant/Associate Professor - Statistics Applicant: Zhuanzhuan Ma
- 11.2021 West Virginia University
   The Department of Mathematics and Statistics
   Assistant/Associate Professor Statistics
   Applicant: Zhuanzhuan Ma

The U.S. Department of Defense, Operational Evaluation Division The Institute for Defense Analyses (IDA)

- 11.2021 A full-time staff research position Applicant: Veniamin Smirnov
- 10.2021 Augsburg University

The Department of Mathematics and Statistics
Assistant/Associate Professor - Statistics
Applicant: Zhuanzhuan Ma

Oakland University The Department of Mathematics and Statistics

10.2021 Assistant/Associate Professor - Statistics Applicant: Zhuanzhuan Ma

> The Grinnell College Department of Mathematics and Statistics

10.2021 Assistant/Associate Professor - Statistics Applicant: Sachith Dassanayaka

The Grinnell College

Department of Mathematics and Statistics

10.2021 Assistant/Associate Professor - Statistics Applicant: Zhuanzhuan Ma

> The University of New Hampshire The Peter T. Paul College of Business and Economics

10.2021 Assistant/Associate Professor - Statistics Applicant: Zhuanzhuan Ma

> The South Dakota Board of Regents, Public Universities & Special Schools The Department of Mathematics and Statistics

- 10.2021 Assistant/Associate Professor Statistics Applicant: Zhuanzhuan Ma
- 10.2021The US National Security AgencyMathematics Development Program, Math Hiring office

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Applicant:	Smirnov	v	en1	amin
1 ippiiouine.	Simmor,	•	VIII	willin

Wake Forest University Department of Mathematics & Statistics

10.2021 Assistant Professor Applicant: Sachith Eranga Dassanayaka Mudiyanselage

> University of Kelaniya, Sri Lanka Faculty of Science

10.2021 Lecturer position Applicant: Mahanama, Thilini

> University of North Carolina, Chapel Hill Department of Mathematics & Statistics

10.2021Assistant ProfessorApplicant: Sachith Eranga Dassanayaka Mudiyanselage

2020 Fellowship Travel International

USIP Peace Scholar fellowship Program 2022-23 for students writing doctoral
 dissertations on topics broadly related to conflict management, peacebuilding and
 relevant security studies employing qualitative or quantitative approaches
 Applicant: Jayawardena, Sithma

- MathJobs.Org
   American Mathematical Society in cooperation with the Duke University
   Department of Mathematics
   Applicant: Zhuanzhuan Ma
- 10.2021 <u>zintellect.com</u>, the Opportunity Catalog
   ORAU and the Oak Ridge Institute for Science and Education (ORISE)
   Applicant: Smirnov, Veniamin

10.2021	MathJobs.Org					
	American Mathematical Society in cooperation with the Duke University					
	Department of Mathematics					
	Applicant: Sachith Eranga Dassanayaka Mudiyanselage					
	Texas Tech University Office of International Affairs					
09.2021	Study Abroad Competitive Scholarship Program Spring 2022					
0,,_0_1	Applicant: Indika Gihan Gunawardana Ilandari Dewage					
	Texas Tech University Office of International Affairs					
	Study Abroad Competitive Scholarship Program Spring 2022					
09.2021	Applicant: Himali Sakunthala Kalanchige					
	Texas Tech University Office of International Affairs					
08.2021	Study Abroad Competitive Scholarship Program Spring 2022					
	Applicant: Kusal Chirantha Rathnayake					
	Texas Tech University Office of International Affairs					
00 2021	Study Abroad Competitive Scholarship Program Spring 2022					
08.2021	Applicant: Hettiarachchige Sithma Sineka Pinto Jayawardena					
	Texas Tech University Office of International Affairs					
	Study Abroad Competitive Scholarship Program Spring 2022					
08.2021	Applicant: Sachith Eranga Dassanayaka Mudiyanselage					
06.2021	AcademicJobsOnline.Org					
	A reference Letter on behalf of Dr. Isuru Dassanayake					
	(#1079734/1064687/1064675) uploaded June 2021					
04.2021	Drew University					

DR. DIMITRI VOLCHENKOV, TTU

	The Computer Science & Engineering Department.
	Position: Assistant Professor
	Applicant: Shuvalaxmi Dass
	Bowling Green State University,
	Mathematics and Statistics Dept.,
04.2021	Position: Assistant Professor, full-time, tenure-track
	Applicant: Isuru Dassanayake
	Villanova University,
	Mathematics and Statistics Dept.,
04.2021	Position: Visiting Assistant Teaching Professor/Visiting Instructor
	Applicant: Isuru Dassanayake
	Rowan University,
	Mathematics and Statistics Dept.,
04.2021	Position: Tenure Track Assistant Professor
	Applicant: Isuru Dassanayake
	Miami University,
	Business School
04.2021	Position: Assistant Teaching Professor/Assistant Lecturer of Business Analytics
	Applicant: Ahmed Belhad
	University of Hartford,
	Mathematics and Statistics Dept.,
04.2021	Position: Tenure Track Assistant Professor of Business Analytics and Data
	Science
	Applicant: Ahmed Belhad
03.2021	University of Central Florida,
03.2021	Mathematics and Statistics Dept.,

	Position: Assistant Professor, Statistics and Data Science Applicant: Ahmed Belhad
03.2021	Harvard University, Harvard T.H. Chan School of Public Health Department/Area Biostatistics Position: Postdoctoral Research Fellow in Climate Epidemiology School Applicant: Ahmed Belhad
03.2021	University of Central Florida, Mathematics and Statistics Dept., Position: Visiting Assistant Professor, Statistics and Data Science, 500053 Applicant: Ahmed Belhad
03.2021	University of Massachusetts, Computer Science Department Position: Assistant Professor Applicant: Shuvalaxmi Dass
03.2021	Texas Tech University Position: TTU SIAM Graduate Scholarship for the year 2021-2022 Applicant: Dassanayaka, Sachith Eranga
03.2021	Texas Tech University Position: TTU SIAM Graduate Scholarship for the year 2021-2022 Applicant: Seneviratne, Himali
03.2021	Colorado College, Colorado Springs Position: Visiting Assistant Professor of Mathematics or Statistics Applicant: Ahmed Belhad
03.2021	The University of Hartford

	The Department of Computing Sciences
	Position: Assistant Professor
	Applicant: Shuvalaxmi Dass
	The University of California, Riverside
	The Computer Science & Engineering Department.
03.2021	Position: Assistant Professor
	Applicant: Shuvalaxmi Dass
	Texas Tech University
	Position: TTU SIAM Graduate Scholarship for the year 2021-2022
02.2021	Applicant: Kusal Rathnayake
	Texas Tech University
	Position: Doctor of Education in Higher Education Administration Program
02.2021	Applicant: Luciano De Paula Vilas Boas
	Texas Tech University
02 2021	Program: Anne and Bill Fisher Memorial Endowed Scholarship
02.2021	Applicant: Sachith Eranga Dassanayaka Mudiyanselage
	The University of North Carolina at Chapel Hill
	The Computer Science Department.
02.2021	Position: Assistant Professor
	Applicant: Shuvalaxmi Dass
	Stephen F. Austin State University
02.2021	Position: Assistant Professor of Statistics
	Applicant: Ahmed Belhad
02.2021	University of Central Arkansas

	Position: Assistant Professor of Cybersecurity-Computer Science position
	Applicant: Shuvalaxmi Dass
	Texas Tech University Office of International Affairs
01.2021	Study Abroad Competitive Scholarship Program
	Applicant: Sachith Eranga Dassanayaka Mudiyanselage
	Sam Houston State University,
	Computer Science Department
01.2021	Position: Assistant Professor of Computer Science
	Applicant: Shuvalaxmi Dass
	National Science Foundation (NSF)
01 2021	Position: 2021 NSF Math Sciences Graduate Internship
01.2021	Applicant: Himali Sakunthala Seneviratne Kalanchige
	University of Delaware
	Office of Graduate Admission, Data Science
01.2021	Position: PHD program
	Applicant: Ahmed Sabit
	Microsoft Research
01 0000	Position: Researcher Position
01. 2020	Applicant: Hrishikesh Das
	Oakland University
	Department of Computer Science
01.2020	Position: Assistant Professor of Computer Science
	Applicant: Shuvalaxmi Dass
01.2020	University of Utah

	School of Computing
	Position: Assistant Professor of Computer Science
	Applicant: Shuvalaxmi Dass
	University at Albany
01.2021	Position: Assistant Professor of Computer Science
01.2021	Applicant: Shuvalaxmi Dass
	University of Maryland, College Park
	Position: Assistant Professor of Computer Science
01.2021	Applicant: Shuvalaxmi Dass
	University of South Carolina
01.2021	Position: Assistant Professor of Computer Science
	Applicant: Shuvalaxmi Dass
	California State University system, Computer Science
01 0001	Position: Assistant Professor position at the San Jose campus
01.2021	Applicant: Shuvalaxmi Dass
	Bentley University
	Office of Graduate Admission, Data Science
01.2021	PhD program
01.2021	Applicant: Ahmed Sabit
	Applicant. A milital Subt
	Worcester Polytechnic Institute
	Graduate Programs, Data Science
01.2021	PhD program
	Applicant: Ahmed Sabit
01.2021	U.S. Food and Drug Administration (FDA)

	FDA NCTR Summer Student Research Participation Program 2021
	Applicant: Mahanama, Thilini, Mathematics PhD student
	Graduate School,
	Texas Tech University
01.2021	Doctoral Dissertation Completion Fellowship Preliminary Nomination – 2021
	Applicant: Smirnov Veniamin
	University of California, San Diego, Mathematics department
12 2020	Position: Stefan E. Warschawski Visiting Assistant Professor Position
12.2020	Applicant: PhD Erdi Kara
	Texas Tech University,
	Graduate School
12.2020	Recommendation letter for the application to the Mathematics (MS) program
	Applicant: Vidya Paramita
	University of Texas at Arlington,
12 2020	Open Rank Faculty Positions
12.2020	Applicant: PhD Erdi Kara
	Carnegie Mellon University,
	School of Computer Science
11.2020	Graduate program
	Applicant: PhD Mostofa Shakib
	University of California, Berkeley
	Electrical Engineering & Computer Sciences
11.2020	Position: Assistant Professor
	Applicant: PhD Mostofa Shakib

Carnegie Mellon University
College of Engineering, The Electrical and Computer Engineering department
Position: Assistant Professor
Applicant: PhD Mostofa Shakib
Northwestern University
Program: CSSI in the Kellogg Innov & Entrpshp Init Department at Northwestern
University
Applicant: MS Saeed Moradi
Cornell University Graduate School
PhD Program
Applicant: MS Saeed Moradi
Texas Tech University
The Graduate School of Biomedical Sciences,
Program: The Julia Jones Matthews Department of Public Health
Applicant: MS Hossein, Roham
Rice University
Department of Statistics
Position: Assistant Professor
Applicant: Ahmed Belhad, Mathematics PhD student
University of the Incarnate Word
Department of Mathematics and Statistics
Position: Assistant Professor
Applicant: Ahmed Belhad, Mathematics PhD student
Rice University
Department of Statistics

	Position: Assistant Professor
	Applicant: Ahmed Belhad, Mathematics PhD student
	Com Horseton Ctata Huisennite
	Sam Houston State University
06.2020	Position: Assistant Professor
	Applicant: Ahmed Belhad, Mathematics PhD student
	Texas Educator Through an Alternative Certification Program
	Interim TEACH Program
04.2020	TEACH Program Application: ZhuanZhuan Ma, Mathematics PhD student
	Association for Women in Mathematics
02 2020	AWM Graduate Scholarship Application: Mahanama, Thilini, Mathematics PhD
03.2020	student
	Texas Tech University
	SIAM Texas Tech University chapter
03.2020	SIAM Graduate Scholarship Application: Mahanama, Thilini, Mathematics PhD
	student
	University of Colorado Boulder
03.2020	Position: Assistant Professor
	Applicant: Ahmed Belhad, Mathematics PhD student
	Inter-university Consortium for Political and Social Research
03.2020	ICPSR Summer Program in Quantitative Methods of Social Research
	Application: ZhuanZhuan Ma, Mathematics PhD student
02.2020	Texas Tech University
02.2020	SIAM Texas Tech University chapter

	SIAM Scholarship Application: Dassanayaka Mudiyanselage, Sachith Eranga
01.2020	Mathematics PhD student Texas Tech University Department Mathematics & Statistics Departmental Scholarship Application: Isuru Dassanayake, Mathematics PhD student
01.2020	Texas Tech University Department Mathematics & Statistics Departmental Scholarship Application: Mahanama, Thilini, Mathematics PhD student
01.2020	Texas Tech University Texas Tech Alumni Scholarships Applicant: Mahanama, Thilini, Mathematics PhD student
01.2020	Texas Tech University Financial Aid Office Applicant: Christopher Elizondo, Mathematics student
12.2019	Ithaca College Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student
12.2019	Skidmore College Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student
11.2019	Butler University

Department of Mathematics, Statistics, and Actuarial Science Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student

11.2019 Longwood University
 Department of Mathematics and Computer Science
 Position: Assistant Professor
 Applicant: Ahmed Belhad, Mathematics PhD student

### 11.2019 Rice University

Department of Statistics Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student

The University of Texas at Dallas The School of Natural Sciences and Mathematics

11.2019 Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student

> Texas Tech University Department of Mathematics & Statistics

10.2019 Position: Assistant Professor Applicant: Ahmed Belhad, Mathematics PhD student

Department of Defense (DoD)

09.2019 The SMART Scholarship-for-Service Program Applicant: Smirnov Veniamin, Mathematics PhD student

National Security Agency

09.2019 Graduate Mathematics Program (GMP) – 1128494 Internship application

	Applicant: Smirnov Veniamin, Mathematics PhD student
09.2019	Texas Tech University, Study Abroad Office Program: Study Abroad Competitive Scholarship, Application ID: 464863AFE741CD12 Applicant: Dassanayaka Mudiyanselage, Mathematics PhD student
09.2019	Texas Tech University, Study Abroad Office Program: Study Abroad Competitive Scholarship, Application: 7D1475D1B49A930C Applicant: Rodrigo A Gutierrez
03.2019	Texas Tech University, Department of Mathematics & Statistics Shelby Hildebrand Graduate Fellowship Program Applicant: Smirnov, Veniamin, Mathematics PhD student.
03.2019	Texas Tech University, Department of Mathematics and Statistics, Shelby Hildebrand Graduate Fellowship Program Applicant: Mahanama, Thilini, Mathematics PhD student.
03.2019	Texas Tech University, Department of Mathematics and Statistics, Shelby Hildebrand Graduate Fellowship Program Applicant: Dassanayaka Mudiyanselage, Sachith Eranga, Mathematics PhD student.
01.2019	Texas Tech University, Student Financial Aid & Scholarships Applicant: Servin Torres Eduardo Mathematics Senior
01.2019	Texas Tech University, Student Financial Aid & Scholarships

	Applicant: Watson Nicholas, Foundational Engineering Junior
	Texas Tech University, Study Abroad Office
01.2019	Program: Study Abroad Competitive Scholarship
	Applicant: Grant Christian Handley
	Texas Tech University, Study Abroad Office
01.2018	Program: Study Abroad Competitive Scholarship
01.2018	Applicant: Syed Tahsin Islam
	The certification letter on behalf of Dean Zhou, Shunyong (SUSE, Sichuan,
	China) on the visiting scholarship at the Department of Mathematics and
06.2018	Statistics, Texas Tech University in Lubbock, TX, USA from August, 24
00.2010	2017 to August, 23 2018
	supported by the Chinees government.
	A reference Letter on behalf of Dr. Xing Siyuan (#1079734/1064687/1064675)
10.2018	uploaded on AcademicJobsOnline.Org
	University of Tennessee at Chattanooga
	Mechanical Engineering
12.2018	Position: Assistant Professor
	Applicant: Dr. Xing Siyuan
	California State University - Northridge
10. 2018	Mechanical Engineering – Control Systems and Design
	Position: Assistant Professor
	Applicant: Dr. Xing Siyuan
01 2010	Oakland University
01. 2019	Mechanical Engineering

Position: Assistant Professor Applicant: Dr. Xing Siyuan

Texas Tech University

Student Financial Aid & Scholarships

01. 2019 Applicant: Saeed Suleiman, Software Engineering Junior

> Cal Poly State University, Mechanical Engineering The recommendation phone call to HR/Personnel Coordinator 805-756-5585 on

12.2018 behalf of Dr. Siyuan Xing, a finalist for the Assistant Professor position inMechanical Engineering Systems and Controls at Cal Poly State University.

Texas Tech University, Department of Industrial Engineering,

01.2019 Faculty Hiring Meeting with two candidates (Invited by Dr. Ismael de Farias) Position: Assistant Professor

Department of Energy (DOE)

Project Title: Energy Efficiency and Renewable Energy (EERE) Science,

02.2019 Technology and Policy (STP) Opportunity Applicant: Thilini Mahanama

National Science Foundation (NSF)

- An Academic recommendation on behalf of Thilini Mahanama for NSF 11.2018
  - Mathematical Sciences Graduate Internship (MSGI) Program

National Science Foundation

NSF Graduate Research Fellowship Program (GRFP)

10.2018 Applicant: Thilini Mahanama

National Science Foundation

12. 2018 Mathematical Sciences Graduate Internship (MSGI) Program

Applicant: Abootaleb Shirvani

Preparing the College Cooperation Agreements and Graduate Programs

10/2022	Attendee: Texas Tech University – Lockheed Martin Discussion/ Meeting on Science of Sustainment cooperation program. Dy, Le IMMS Director, TTU; Dr. Jeremiah Cain, Director of Sustainment Engineering, Lockheed Martin; Dr. Joseph A. Heppert, Vice President, OR&I, TTU; Dr. Stephen Bayne, Interim Dean, WCOE, TTU; Dr. Michelle Pantoya, Director, Combustion Laboratory, TTU
06.2019	Attendee: Meeting with Dr. Zari Rachev, Dr. David Roach, Associate Dean, Academic Affairs TTU, Stephen T. Crosson, MAI, SRA, FRICS, Managing Director, <i>Integra Realty Resources – Dallas</i> , in the framework of organizing cooperation between the Integra National Litigation Group and the Texas Tech University.
09.2017	Preparing a Cooperation Agreement between the College of Art and Science, TTU and the Sichuan University of Science and Engineering, China
11.2017	Organizing the Graduate Program in "Financial Mathematics" on the Department of Mathematics and Statistics, Texas Tech University, along with Dr. Zari Rachev, Dr. Akif Ibragimov, Dr. Alex Trindade, Dr. Jay Conover and Dr. Souparno Ghosh; Member of a College Curriculum Committee
05.2018	Texas Tech University, Rawls College of Business Attendee, Meeting with Dr. Zari Rachev, Dr. Brent Lindquist, Dr. Magdalena Toda,

	Dr. Margaret Wiliams in the framework of organizing the Graduate Program in
	"Financial Mathematics" on the Department of Mathematics and Statistics,
	Texas Tech University
02. 2018	Lubbock Economic Development Alliance
	Risk Assessment and Lubbock Urban Development
	Attendee, Meeting with Dr. Zari Rachev, Dr. Brent Lindquist, Jessica Marlar
07. 2018	Texas Tech University, Innovation Hub
	Attendee: Meeting with Dr. Zari Rachev, Mrs Kimberly Gramm
	A discussion on the possibility for the MS TTU students to take part in the TTU
	Acceleration program at the IH TTU and possible collaboration.
Department	al Service

- Since 2021 A Member of the Departmental Resource Committee, Department of Mathematics and Statistics, Texas Tech University
  - 10/2023 Participation in the Meeting of the Departmental Resource Committee,
     Department of Mathematics and Statistics
     Texas Tech University
  - 09/2023 Texas Tech University Department of Mathematics and Statistics Teaching Evaluation & Peer Review Evaluation for the Years 2021-2023 Assistant Professor: Dr. Juntao Huang
  - 01/2022 Texas Tech University Department of Mathematics and Statistics Teaching Evaluation & Peer Review Evaluation for the Years 2019-2021 Assistant Professor: Dr. Stamatis Pouliasis

### **Community Service**

	Texas Tech University, Department Mathematics and Statistics
05.2018	Organizing the XVI edition of the Emmy Noether Day (12K students)
	Organizing the Conference Poster Session
	Texas Tech University, Department Mathematics and Statistics Organizing the
05.2019	XVII edition of the Emmy Noether Day at the Department Mathematics and
	Statistics, TTU

#### Service to the Profession

- Since 2020 Chairing the V. Afraimovich International Award Committee for outstanding young scholars in Nonlinear Physical Science
  Nonlinear Science and Complexity Conference Series,
  Laureates: Vitali Vougalter (Canada), 2020; Nikolay V. Kuznetsov (Russia), 2021;
  Michael Small (Australia),2022; Edson Denis Leonel (Brazil),2023;
- 09/ 2023 Charing the Scientific Awards Committee for the Days of Applied Nonlinearity and Complexity (DANOC) hosted on January 12-14, 2024 by the Aristotle University of Thessaloniki, Greece.
  - Ichtiaroglou Award for lifetime achievement in the Theory of Nonlinear Systems (Laureate 2023: Tasos Bountis)
  - Lorenz Award for lifetime achievement in Dynamical Systems, Methods, and Techniques in Natural Sciences Systems (Laureate 2023: Robert Mackay)

#### Editorship

Providing guidelines to authors for preparing and submitting manuscripts; establishing and defining policies on conflicts of interest for all involved in the publication process, including editors, staff (e.g., editorial and sales), authors, and reviewers; providing a clear statement of the Journal's

policies on authorship criteria; treating all authors with fairness, courtesy, objectivity, honesty, and transparency and protecting the confidentiality of every author's work; making editorial decisions with reasonable speed and communicating them in a clear and constructive manner in the following:

• Journals

Since 2020 - Journal of Environmental Accounting & Management, L&H Scientific
Publishing (USA)
Since 2020 - Advanced Mathematical Models & Applications, Jomard Publishing
Since 2016 - Complexity, John Wiley & Sons and Hindawi
Since 2016 - Vibration Testing and System Dynamics, L&H Scientific Publishing (USA)
Since 2012 - Discontinuity, Nonlinearity and Complexity, L&H Scientific Publishing (USA)
Since 2012 - Communications in Nonlinear Science and Numerical Simulations, ELSEVIER

• Book Series

Since 2018 - Nonlinear Physical Science ISSN: 1867-8440 - Springer

Providing written, unbiased, constructive feedback on the scholarly merits and the scientific value of the work as a *Reviewer* in the following:

• Journals

Since 2023 – European Journal of Mathematics
Since 2023 – Advances in Engineering Software
Since 2023 – Chaos, Solitons & Fractals
Since 2021- International Journal of Bifurcation and Chaos
Since 2020- Complex Variables and Elliptic Equations
Since 2019- Journal of Modern Mechanical Engineering and Technology
Since 2018- Advances in Systems Science and Applications
Since 2018- The Egyptian International Journal of Engineering Sciences and Technology
Since 2018- Journal of Data Analysis and Information Processing
Since 2016- IEEE Transactions on Knowledge and Data Engineering
Since 2009- Statistics and Probability Letters
Since 2017- International Journal of Sociology and Anthropology
Since 1998- Journal of Statistical Physics
Since 2010- Discrete Applied Mathematics

- Since 2008- Zentralblatt für Mathematik
- Since 2009- Large-scale Systems Control
- Since 2012- Discontinuity, Nonlinearity and Complexity
- Since 2012- PLoS ONE
- Since 2010- Chaos
- Since 2012- Communications in Nonlinear Science and Numerical Simulations
- Since 1998- European Physical Journal B
- Since 2000- Mathematical reviews (AMS)
- Since 2008- Proceedings of the Royal Society A
- Since 1997- Journal of Physics A
- Since 1999- Physica D
- Since 2001- Stochastics and dynamics
- Since 1998- Arabian Journal of Science and Engineering (University of King Fahd)
- Since 2001- Nonlinear Dynamics
- Since 2000- Physics Letter A
- Since 2015- Advances in Fuzzy Systems
- Since 2017- Journal of Dance Medicine and Science
- Since 2018- Data-Enabled Discovery and Applications
- Book Series

Since 2010- Springer Series: Applied Mathematical Sciences Since 2011- Springer Series: Interdisciplinary Applied Mathematics Since 2012- Springer Series: Theoretical and Mathematical Physics Since 2008- Springer Series: Understanding Complex Systems Since 2009- Springer Series: Institute for Nonlinear Science

## Other Synergetic Activities (not listed above)

1999 – 2006 Member of the National Board of Specialists (Physics) (Russia)
1996 – 2006 Member of the National Board of the Physics Olympiad (Russia)