
RESEARCH INTERESTS

Mathematical Biology (Microtubules, Alzheimer Disease, Modeling of the Tumor Radiotherapy).

Nonlinear Partial Differential Equations, Boundary Layer Theory.

Mathematical Modeling in Engineering (Vibrations, Differential Equations).

Signal Processing (Compressed Sensing) and Remote Sensing.

Stochastic Processes, Stochastic Modeling.

EDUCATION

- 2008 Ph.D in Applied Mathematics**, Department of Mathematics, Indiana University Bloomington, (<http://www.math.indiana.edu/>).
- 1997 M.Sc. in Mathematics**, Department of Mathematics, Isfahan University of Technology, (<http://mathdept.iut.ac.ir/en>).
- 1994 B.Sc. in Electrical Engineering**, Department of Electrical and Computer Engineering, Isfahan University of Technology, (<http://www.iut.ac.ir/en>).

POSITIONS HELD

- 2015-Present Associate Professor of Mathematics**, Department of Mathematics and Statistics, Mississippi State University, (<http://www.math.msstate.edu/>).
- 2009-2015 Assistant Professor of Mathematics**, Department of Mathematics and Statistics, Mississippi State University, (<http://www.math.msstate.edu/>).
- 2008-2009 Post Doctoral Fellow**, Department of Biology, Indiana University Bloomington, (<http://www.bio.indiana.edu/>).
- 2002-2008 Research Assistant and Associate Instructor**, Department of Mathematics, Indiana University Bloomington, (<http://www.math.indiana.edu/>).

REFEREED JOURNAL PUBLICATIONS

- [1] **Shantia Yarahmadian, and Kevin Zumbrun**, *Pointwise Green function bounds and long-time stability of large-amplitude noncharacteristic boundary layers*, SIAM Journal on Mathematical Analysis, Volume 40, Issue 6, (2009) 2328-2350.
- [2] **Shantia Yarahmadian, Blake Barker, Kevin Zumbrun, and Sidney L Shaw**, *Existence and stability of steady states of a reaction convection diffusion equation modeling microtubule formation*, Journal of mathematical biology, Volume 63, Issue 3, (2011) 459-492.
- [3] **Wenchao Wang, Mohamad S Qatu, and Shantia Yarahmadian**, *Accuracy of shell and solid elements in vibration analyses of thin-and thick-walled isotropic cylinders*, International Journal of Vehicle Noise and Vibration, Volume 8, Issue 3, (2012) 221-236.
- [4] **Majid Mahrooghy, Nicolas H Younan, Valentine G Anantharaj, James Aanstoos, and Shantia Yarahmadian**, *On the use of the genetic algorithm filter-based feature selection technique for satellite precipitation estimation*, IEEE Journal of Geoscience and Remote Sensing Letters, Volume 9, Issue 5, (2012) 963-967.

- [5] **Majid Mahrooghy, Nicolas H Younan, Valentine G Anantharaj, James Aanstoos, and Shantia Yarahmadian**, *On the use of a cluster ensemble cloud classification technique in satellite precipitation estimation*, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Volume 5, Issue 5, (2012) 1356-1363.
- [6] **S Mojtaba Matinkhah, Siavash Khorsandi, and Shantia Yarahmadian**, *A new handoff management system for heterogeneous wireless access networks*, International Journal of Communication Systems, 35(6): 1749-1761 (2014).
- [7] **Mehdi F Harandi, Shantia Yarahmadian, Mohammad Sepehrifar and Pieter Hajm van Gelder**, *The dichotomous Markov process with nonparametric test application; a decision support method in long-term river behavioral analysis: the Zayandeh Rud River; a case study from central Iran*, Stochastic Environmental Research and Risk Assessment, 28:1889-1896 (2014).
- [8] **Shantia Yarahmadian and Masoud Yari**, *Phase Transition Analysis of the Dynamic Instability of Microtubules*, Nonlinearity, Volume 27, Number 9, September 2165-2176, (2014).
- [9] **Majid Mahrooghy, Shantia Yarahmadian, Vineetha Menon, Vahid Rezanian, and Jack A Tuszyński**, *The use of compressive sensing and peak detection in the reconstruction of microtubules length time series in the process of dynamic instability*, Computers in biology and medicine, Volume 65, 25-33, (2015).
- [10] **Mohammad Sepehrifar, and Shantia Yarahmadian**, *Decreasing renewal dichotomous Markov noise shock model with hypothesis testing applications*, Statistical Papers, Online, 1-10, (2016).
- [11] **Shahriar Shahrokhbadia, Farshid Vahedifard, and Shantia Yarahmadian**, *Integration of Thiele Continued Fractions and the method of fundamental solutions for solving unconfined seepage problems*, Computers and Mathematics with Applications, Volume 71, Issue 7, 1479-1490, (2016).
- [12] **Amin Oroji, Mohd Omar, and Shantia Yarahmadian**, *An Itô stochastic differential equations model for the dynamics of the MCF-7 breast cancer cell line treated by radiotherapy*, Journal of Theoretical Biology, Volume 407, 128-137, (2016).
- [13] **Mohammad Sepehrifar, and Shantia Yarahmadian**, *Testing Monotonic Equilibrium Residual Entropy of N-State Random Evolution*, Communications in Statistics-Theory and Methods, Online,(2016).
- [14] **S Mojtaba Matinkhah, Siavash Khorsandi, and Shantia Yarahmadian**, *A Load Balancing System for Autonomous Connection Management in Heterogeneous Wireless Networks*, Computer Communications, online (2016).

REFEREED PROCEEDINGS PUBLICATIONS

- [1] **Ahmad Movahedian Attar, Shantia Yarahmadian and Shadrokh Samavi**, *Coverage Estimation in Floorplan Visual Sensor Networks*, IEEE Proceedings of Sensors, (2013), 1-4.
- [2] **Ahmad Movahedian Attar, M Hamed Izadi, Maedeh Movahedian, and Shantia Yarahmadian**, *Coverage estimation in heterogenous floorplan visual sensor networks*, IEEE Proceeding of Eighth International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA), (2013) 146-150 .

- [3] **Amin Kargarian, Shantia Yarahmadian, Mohammad Sepehrifar, and Yong Fu**, *Dichotomous Markov Noise Technique to Model Wind Power Uncertainty in Microgrid Operation*, To appear in: IEEE Proceeding of Great Lakes Symposium on Smart Grid and the New Energy Economy (2014).
- [4] **Shantia Yarahmadian, Vineetha Menon, and Vahid Rezaia**, *On Using Compressed Sensing and Peak Detection Method for the Dynamic Instability Parameters Estimation for Microtubules Modeled in three States*, IEEE Proceeding of IEEE International Conference on Bioinformatics and Biomedicine, BIBM (2015).
- [5] **Amin Oroji, Mohd bin Omar, and Shantia Yarahmadian**, *A new ODE tumor growth modeling based on tumor population dynamics*, THE 22ND NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM22): Strengthening Research and Collaboration of Mathematical Sciences in Malaysia, (2015).

SUBMITTED JOURNAL PAPERS

- [1] **Shantia Yarahmadian, Vineetha Menon, Vaid Rezaia and Majid Mahrooghy**, *Wavelet-Based Compression and Peak Detection Method for the Experimentally Estimation of Microtubules Dynamic Instability Parameters Identified in Three States*, Submitted to Bulletin of Biology and (2014).
- [2] **Amin Oroji, Shantia Yarahmadian, Sarkhosh Seddighi and Mohd Omar**, *A Mathematical Model for Tumor Growth Based on Cells Population Dynamics and Tumor Lifespan*, Submitted to Journal of Mathematical Biology (2015).
- [3] **Amin Oroji, Mohd Omar, and Shantia Yarahmadian**, *On the Stability and Bifurcation Analysis of the ODE System of Cell Population for the Tumors treated by Radiotherapy*, In process of submission (2016).

IN PREPARATION

- [1] **Hadi Khani, Shantia Yarahmadian, and Eda Asili**, *A Mathematical Model for Alzheimer Disease and its Treatment Based on the Metal Hypothesis*.
- [2] **Hadi Khani, Shantia Yarahmadian, and Mohammad B. Sepehrifar**, *Three-Dimensional Quantitative Structure Activity Relationship Analysis on γ -Secretase Modulators of Alzheimer's Decease Using Linear and Nonlinear Statistical Methods*.
- [3] **Shantia Yarahmadian**, *Green's function and first passage time distribution for dynamic instability of microtubules in three states*, In process of submission (2016).

JOURNALS REFEREED

Nonlinearity
 IEEE Transactions on Emerging Topics in Computing
 Electronic Journal of Differential Equations
 Mathematical Methods in the Applied Sciences

EDITORIAL BOARD

Austin Journal of Medical Oncology

AWARDS

- 2011 State Pride Award (Cobb Faculty Award) \$2500.
- 2012 Henry Family Research Fund, An Analytical Model for Breakdown of Microtubules in Alzheimer Disease, \$4970.
- 2009-2012 6 Travel Awards from Mathematical Bioscience Institute Total: \$12000.
- 2010 2 Travel Awards from Mathematical Bioscience Institute, Total: \$4000.

- 2012 Travel Award for NSF Summer Institute: Materiomics-Merging Biology and Engineering in Multiscale Structures and Materials, National Science Foundation (NSF), Massachusetts Institute of Technology(MIT), May 30-June 1, 2012, \$4000.
- 2013 Travel Award for NSF Summer Institute: From Cell to Ecosystems, Frontiers in Collaborative Quantitative Physics Based Modeling of Biological Process, NSF and Pan American Institute of Advanced Studies, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil, July 8-26, 2013, \$6000.

RECENT SUBMITTED GRANT PROPOSAL

- 2014 Dynamic Instability of Microtubules through Evans Functions Method, PI, \$484,133, Submitted to NSF (Not Funded).

WORKSHOPS AND SHORT COURSES ATTENDED

Mathematical Development Arising from Biology, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, Nov 8-10, 2009.

Mississippi Academy for Science Teaching (MAST), *Jackson State University*, Jackson, MS, Feb 10, 2010.

Mathematicians in Mathematics Education Workshop Institute for Mathematics and Education, *Institute for Mathematics and Education*, The University of Arizona, Tucson, AZ, Apr 25-27, 2010.

IMA Computing with Uncertainty Workshop, *Institute for Mathematics and Its Applications (IMA)*, Minnesota Oct 16-18, 2010.

IMA Workshop on Numerical Solutions of Partial Differential Equations: Novel Discretization Techniques, *Institute for Mathematics and Its Applications (IMA)*, Minnesota Oct 30-31, 2010.

Ecology and Control of Invasive Species, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, Feb 21-25, 2011.

Mathematicians in Mathematics Education Workshop Institute for Mathematics and Education, *Institute for Mathematics and Education*, The University of Arizona, Tucson, AZ, May 23-25, 2011.

Shantia Yarahmadian, *Louisiana/Mississippi Section of the Mathematical Association of America*, Joint Mathematics Meetings, New Orleans, LA, January 6-9, 2011.

New Questions in Probability Theory Arising in Biological Systems, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, Sep 12-16, 2011.

Spatio-Temporal Dynamics in Disease Ecology and Epidemiology, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, Oct 10-14, 2011.

MBI Institute Partner Meeting, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, Feb 12, 2012.

Algebraic Methods in Evolutionary and Systems Biology, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, May 7-11, 2012.

Algebraic Methods in Evolutionary and Systems Biology, *Mathematical Bioscience Institute (MBI)*, The Ohio State University, May 7-11, 2012.

NSF SUMMER INSTITUTES

Materiomics-Merging Biology and Engineering in Multiscale Structures and Materials, *National Science Foundation (NSF)*, Massachusetts Institute of Technology(MIT), May 30-June 1, 2012.

From Cell to Ecosystems, Frontiers in Collaborative Quantitative Physics Based Modeling of Biological Process, National Science Foundation (NSF) and Pan American Institute of Advanced Studies, Porto Alegre, Brazil, July 8-26, 2013.

SCHOLARLY PRESENTATIONS

Shantia Yarahmadian, *A Mathematical Model for Regulation of Microtubules*, College of Arts and Sciences Research Showcase, Mississippi State University, Oct 21-22, 2009.

Shantia Yarahmadian, *Mathematical Modeling of Dynamic Instability of Microtubules*, Center for Advanced Vehicular Systems (CAVS), Mississippi State University, Dec 5, 2009.

Shantia Yarahmadian, *Existence and Stability of Steady States of a Reaction Convection Diffusion Equation Modeling Microtubule Formation*, AMS Special Session on Biomathematics, AMS Joint Mathematics Meetings, San Francisco, 13-16 Jan, 2010.

Shantia Yarahmadian, *Introduction to Chemical Reaction Networks (4 Talks)*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Spring 2010.

Shantia Yarahmadian, *Mathematics of Heart Physiology*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Spring 2010.

Shantia Yarahmadian, *Mathematics of Tumor Growth*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Spring 2010.

Shantia Yarahmadian, *Diffusion effect in formation of Microtubules*, Miniworkshop in Mathematical Biology, Center for Computational Sciences (CCS), March 26, 2010.

Shantia Yarahmadian, *The Effect of Sampling Rate on the Statistics of Microtubules*, AMS Special Session on Mathematical Biology and Ecology, AMS Joint Mathematics Meetings, Louisiana, Jan 6-9, 2011.

Shantia Yarahmadian, *An Invitation to Mathematical Biology*, Math Club, Mississippi State University, Spring 2011.

Shantia Yarahmadian, *Euler Disk, Demonstration, Modeling, Examples in Engineering and Applied Mathematics Teaching (3 Talks)*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Spring 2011.

Shantia Yarahmadian, *Dichotomous Markov Noise*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Fall 2011.

Shantia Yarahmadian, *Existence and Stability of Steady States of the Microtubule Formation in Three States*, AMS Special Session on Nonlinear Analysis of Partial Differential Equation Models in Biology and Chemical Physics, AMS Joint Mathematics Meetings, Boston, Jan 4-7, 2012.

Shantia Yarahmadian, *Introduction to Compressed Sensing (4 Talks)*, Graduate Student Applied Mathematics Seminars, Department of Mathematics and Statistics, Spring 2012.

Wenchao Wang, Mohamad S. Qatu, and Shantia Yarahmadian, *The Accuracy Study of the FEA Elements for the Free Vibration Simulation*, FISITA 2012 World Automotive Congress, Beijing China, Nov 27-30, 2012.

Shantia Yarahmadian, *Free Vibrational Analysis of Thin-and Thick-Walled Orthotropic and Composite Hollow Cylinders Using 3D Elasticity Theory*, Mechanics of Nano, Micro and Macro Composite Structures, Politecnico di Torino, 18-20 June 2012.

Shantia Yarahmadian, *Louisiana/Mississippi Section of the Mathematical Association of America*, AMS Special Session on Nonlinear Analysis of Partial Differential Equation Models in Biology and Chemical Physics, Joint Mathematics Meetings AMS Special Session, Jan 4-7, 2012.

Morteza Kiani, Shantia Yarahmadian, Keiichi Motoyama, Mohammad Sepehrifar, *Application of Fourier series to demonstrate the energy absorption phenomenon in aluminum tubes under impact loading*, 9th MSU-UAB Conference on Differential Equations and Computational Simulations, Mississippi State University, October 4-6, 2012.

Wenchao Wang, and Shantia Yarahmadian, *The Oscillation Behavior of 3D Elasticity Exact Solution for Orthotropic Hollow Cylinder*, 9th MSU-UAB Conference on Differential Equations and Computational Simulations, Mississippi State University, October 4-6, 2012.

Shantia Yarahmadian, *Dynamic instability of microtubules in three states*, 9th MSU-UAB Conference on Differential Equations and Computational Simulations, Mississippi State University, October 4-6, 2012.

Shahriar Piroozram, Sheida Riahi and Shantia Yarahmadian, *Golden Ratio: Ornamentations of Chehelsotoun, a Safavid Dynasty Palace in Isfahan*, MAA Session on Mathematics and the Arts: Practice, Pedagogy, and Discovery, AMS Joint Mathematics Meetings, San Diego, Jan 9-12, 2013.

Shantia Yarahmadian, Hadi Khani, and Eda Asili, *A Mathematical Model for Alzheimer Disease and its Treatment Based on the Metal Hypothesis*, From Cell to Ecosystems, Frontiers in Collaborative Quantitative Physics Based Modeling of Biological Process, National Science Foundation (NSF) and Pan American Institute of Advanced Studies, Department of Physics, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil, July 8-26, 2013 .

A. Kargarian, S. Yarahmadian, M. Sepehrifar, and Y. Fu, *Dichotomous Markov Noise Technique to Model Wind Power Uncertainty in Microgrid Operation*, Great Lakes Symposium on Smart Grid and the New Energy Economy (GLS), Chicago, IL, 22-25 Sep 2013.

Ahmad Movahedian Attar, M. Hamed Izadi, Maedeh Movahedian, and Shantia Yarahmadian, *Coverage Estimation in Floorplan Visual Sensor Networks (Poster Presentation)*, IEEE Eighth International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA), University of Technology of Compiègne, Compiègne, France, 28-30 Oct 2013.

Ahmad Movahedian Attar, Shantia Yarahmadian, Shadrokh Samavi, *Coverage Estimation in Heterogenous Floorplan Visual Sensor Networks (Poster Presentation)*, IEEE Sensors Conference, Baltimore, MD, 3-6 Nov 2013.

Shantia Yarahmadian and Jon Woody, *Dichotomous Markov Noise and Change Points*, Statistics Seminars, Department of Mathematics and Statistics, Nov 2013.

Sayed M. Bateni, Dara Entekhabi, Shantia Yarahmadian, and Thian Y. Gan, *The Stability of A Coupled Energy-Water Balance System (Poster Presentation)*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA, 9-13 Dec 2013.

Y. Azizi, Shantia Yarahmadian, and A. Azizi, *Identification of the Car Seat Foam Using the Free Vibration Response and the Sinusoidal Tracking Algorithm*, SAE World Congress, Detroit, MI, April 8-10, 2014.

Eda Asili, Shantia Yarahmadian, Hadi Khani and Meisam Sharify, *A Mathematical Modeling of Alzheimer Disease and Its Treatment Based On the Metal Hypothesis*, Society of Mathematical Biology Meeting, SMB 2015, Atlanta, GA, June 30-July 3, 2015.

Shantia Yarahmadian, Vineetha Menon, Vahid Rezanian, *On Using Compressed Sensing and Peak Detection Method for the Dynamic Instability Parameters Estimation for Microtubules Modeled in three States*, IEEE Proceeding of IEEE International Conference on Bioinformatics and Biomedicine, BIBM 2015, Washington D.C., Nov 9-12, 2015.

THESIS

2008 **Pointwise Green function bounds and long-time stability of large-amplitude noncharacteristic boundary layers**, *Ph.D Advisor: Kevin Zumbrun*, Department of Mathematics, Indiana University Bloomington, USA.

HONORS/FELLOWSHIPS

2007 Rothrock Teaching Award, Indiana University
2002-2008 Graduate Student Research and Teaching Fellowship, Indiana University.

2008-2009 Postdoctoral Fellowship, Department of Biology, Indiana University.

2010 Project NExT Teaching Fellowship Award: In 2010, I was selected for the teaching fellowship, Project NExT (New Experiences in Teaching) from MAA (Mathematical Association of America). This is a professional development program of MAA for recent Ph.Ds. in mathematical sciences to assist fellows to improve the teaching and learning of undergraduate mathematics.

COURSES TAUGHT AND IN PROGRESS IN MISSISSIPPI STATE UNIVERSITY

- Fall 2009 **Partial Differential Equations I (Graduate Level)**, MA 8333.
- Fall 2009 **Calculus II**, MA 1723.
- Spring 2010 **Partial Differential Equations II (Graduate Level)**, MA 8343.
- Fall 2010 **Introduction to Probability**, MA 6523.
- Fall 2010 **Probability and Random Process**, MA 6533.
- Spring 2011 **Introduction to Partial Differential Equations**, MA 6373.
- Summer 2011 **Calculus I**, MA 1713.
- Summer 2011 **Calculus II**, MA 1723.
- Fall 2011 **Applied Mathematics I (Graduate Level)**, MA 8203.
- Fall 2011 **Ordinary Differential Equations I (Graduate Level)**, MA 8313.
- Spring 2012 **Applied Mathematics II, (Graduate Level)**, MA 8213.
- Spring 2012 **Ordinary Differential Equations II (Graduate Level)**, MA 8323.
- Summer 2012 **Calculus I**, MA 1713.
- Summer 2012 **Calculus II**, MA 1723.
- Fall 2012 **Differential Equations I**, MA 3253.
- Fall 2012 **Calculus of Variations (Graduate Level)**, MA 8283.
- Spring 2013 **Differential Equations I**, MA 3253.
- Spring 2013 **Differential Equations II**, MA 3353.
- Summer 2013 **Differential Equations I**, MA 3253.
- Summer 2013 **Calculus II**, MA 1723.
- Fall 2013 **Applied Mathematics I (Graduate Level)**, MA 8203.
- Fall 2013 **Ordinary Differential Equations I (Graduate Level)**, MA 8313.
- Spring 2014 **Ordinary Differential Equations II (Graduate Level)**, MA 8323.
- Spring 2014 **Integral Equations (Graduate Level)**, MA 8293.
- First Summer Semester 2014 **Calculus II**, MA 1723.
- First Summer Semester 2014 **Calculus III**, MA 2733.
- Second Summer Semester 2014 **Calculus I**, MA 1713.
- Second Summer Semester 2014 **Calculus II**, MA 1723.
- Summer 1, 2014 **Calculus III**, MA 2733.
- Fall 2014 **Applied Mathematics I**, MA 8203.
- Fall 2014 **Ordinary Differential Equations I**, MA 8213.

INDIVIDUAL STUDIES COURSES

- Summer 2011 **Quantitative Genetics and Statistics.**
- Fall 2011 **Three Dimensional Elasticity Analyses.**

- Summer 2012 **Topics in Population Dynamics.**
- Summer 2013 **Wavelet Analysis.**
- Summer 2014 **Topics in Mathematical Biology I.**
- Fall 2014 **Topics in Mathematical Biology II.**

GRADUATE LEVEL DISTANCE LEARNING COURSES

- Fall 2013 **Applied Mathematics I (Graduate Level), MA 8203.**
- Fall 2014 **Applied Mathematics I (Graduate Level), MA 8203.**

PHD STUDENTS

- Eda Asili, (Advisor Mathematics, Since Fall 2013.**
- Maryam Rahmani (Co-Major Advisor), Electrical Engineering, Since Fall 2013.**
- Amin Oroji, (Co-Major Advisor) Mathematics, Since Fall 2013.**

MSc STUDENTS

- Yousof Azizi, Mathematics, Since Spring 2015.**
- William Cordell, Mathematics, Graduated Spring 2015.**
- Chartese Jones, Mathematics, Graduated Spring 2015.**

UNDERGRADUATE STUDENTS

- Trey Leonard, Mathematics and Mechanical Engineering, Since Summer 2015.**

SERVICE ACTIVITIES

SERVICE TO THE DEPARTMENT OF MATHEMATICS AND STATISTICS

- 2010-2013 **Colloquium Committee.**
- 2013-2014 **Graduate Student Recruitment Committee.**
- 2010-2011 **Distant Learning Program Committee.**
- 2010-2014 **Undergraduate Research.**
- 2012 **Search committee.**
- 2010-2014 **Mathclub.**
- 2010-2014 **Webpage Committee.**
- 2013-2014 **Computing and Technology Committee.**

SERVICE TO THE MISSISSIPPI STATE UNIVERSITY

- 2011 **Organizer, *Miniworkshop on Mathematical Biology and Computational Modeling*, Center for Computational Sciences (CCS), Mississippi State University, March 26, 2010.**
- 2010 **Program Chair, *Differential Equation Weekend Conference*, Center for Computational Sciences (CCS), Mississippi State University, May 7, 2011.**
- 2012 **Organizing Committee, *9th MSU-UAB Conference on Differential Equations and Computational Simulations, Organizing Committee*, Center for Computational Sciences (CCS), Mississippi State University, Oct 2012.**
- 2012-Present **Faculty Advisor, *Mississippi State University Chess Club*.**

PHD STUDENTS COMMITTEE MEMBER, MISSISSIPPI STATE UNIVERSITY

- Wenchao Wang, Mechanical Engineering, Graduated in 2011
- Sarath Sasi, Mathematics, Graduated in 2012
- Eunkyung Ko, Mathematics, Graduated in 2012
- Arundhati Baghchi Misra, Mathematics, Graduated in 2012

Lakshmi Sankar Kalappattil, Mathematics, Graduated in 2013

Joseph Ferguson, Mathematics

Velinda Calvert, Mathematics

Amin Kargarian, Electrical Engineering

Ryan Moxon, Electrical Engineering

Maryam Rahmani, Electrical Engineering

Vahid Tari, Mechanical Engineering

Kimia Mortezaei, Civil Engineering

Somayeh Mashayekhi, Mathematics

Vidhya Krishnasamy Saraswathy, Mathematics

Tichomir Tenev, Mechanical Engineering

Akshay Vaghani, Physics

Chunheng Wang, Electrical Engineering

EXTERNAL PHD STUDENTS CO-ADVISING

Mehdi Fasihi Harandi, Civil Engineering, Delft University of Technology, Graduated in 2015

Amin Oroji, Mathematics, University of Malaya, Malaysia

PROFESSIONAL MEMBERSHIPS

SIAM(Society for Industrial and Applied Mathematics)

SMB (Society of Mathematical Biology)

IEEE (Institute of Electrical and Electronics Engineers)

LANGUAGES

English: Fluent

Persian: First Language

German: Reading and Basic Speaking Knowledge

French: Reading Knowledge

Spanish: Reading Knowledge

Turkish: Reading Knowledge

Latin: Elementary Proficiency

Greek: Elementary Proficiency

Arabic: Elementary Proficiency