

*Institute of Mathematical Sciences***Graduate Math Dissertations**

Henok Abebe 2002 <i>Modeling the Current-Voltage (I-V) Characteristics of the MOSFET Device with Quantum Mechanical Effects due to Thin Oxide near 'Si/SiO₂' Interface using Asymptotic Methods</i> (JDP with CSULB) Advisor: Ellis Cumberbatch	Ahmed Al Fares 2022 <i>On Multiplication Groups of Quasigroups</i> Advisor: Gizem Karaali
Shaher Abdallah 2016 <i>General Stability Analysis of Composite Sandwich Plates Under Thermal Load</i> (JDP with CSULB) Advisor: Hsin-Piao Chen	Weaam Alhejaili 2018 <i>A Numerical Study of Steklov Eigenvalue Problems</i> Advisor: Chiu-Yen Kao
Mohammad Abouali 2014 <i>Investigating Castillo-Grone's Mimetic Difference Operators in Development of Geophysical Fluid Dynamics Models Implemented on GPGPUs</i> (JDP with SDSU) Advisor: José Castillo	Ibrahim Ali 2024 <i>Improving F-beta Score in Classifying Shark Data into Shark Behaviors</i> (JDP with CSULB) Advisor: Hen-Geul Yeh
Daniel Akech 2023 <i>On the Symmetric Ideals of Operators and S-Numbers</i> Advisor: Asuman Aksoy	Collins Allan 2018 <i>Probabilistic Microsimulation Modeling of Heterogeneous Traffic Flow</i> (JDP with CSULB) Advisor: Emelinda Parentela
Sajia Akhter 2013 <i>Finding a Novel Way for Fast Sequence Alignment and Exploiting Information Theory in Bacterial Genomes and Complete Phages</i> (JDP with SDSU) Advisor: Robert Edwards	Martin Ambrose 2011 <i>Adaptive Monte Carlo Algorithms for Continuous and Discrete Transport Problems</i> Advisor: Jerome Spanier
Abdulrahman Alansari 2019 <i>Risk Assessment for Marine Construction Projects</i> (JDP with CSULB) Advisor: Hung Nguyen	Florent Angly 2010 <i>A Computational Workflow for the Estimation of Environmental Viral Diversity in Metagenomes</i> (JDP with SDSU) Advisor: Forest Rohwer
Monairah Alansari 2017 <i>Distance in Metric Trees and Banach Spaces</i> Advisor: Asuman Aksoy	Yontha Ath 2000 <i>Stochastic Properties of Uniformly Optimally Reliable Networks (and their Graphs)</i> Advisor: Milton Sobel (UC Santa Barbara)

John Aven <i>Stochastic Dynamics in Coupled Bistable Systems with Applications to Sensor Devices</i> (JDP with SDSU) Advisor: Visarath In	2010	Steven F. Bellenot <i>Completeness and Reflexivity Properties in Topological Vector Spaces using Standard and Nonstandard Methods</i> Advisor: Sandy Grabiner	1974
Mohsen Babaeian <i>Modeling, Designing and Applying Machine Learning Algorithms for Driver Drowsiness Detection</i> (JDP with CSULB) Advisor: Mohammad Mozumdar	2020	Vincent Berardi <i>Analytic Framework for the Design, Implementation, and Analysis of Dynamic, Real-Time Health Interventions</i> (JDP with SDSU) Advisor: Ricardo Carretero	2016
Dariouch Herve Babai <i>Models of HIV Mutations and Interaction with the Immune System using Differential Equations: Coupling "Diffusion," Specific and Global Interaction</i> Advisor: Kenneth Cooke	1995	Susan Anne Elizabeth Berggren <i>Computational and Mathematical Modeling of Coupled Superconducting Quantum Interference Devices</i> (JDP with SDSU) Advisor: Antonio Palacios	2012
Behrouz Babakhani <i>Novel Microstrip Patch Antennas with Frequency Agility, Polarization Reconfigurability, Dual Null Steering Capability and Phased Array Antenna with Beam Steering Performance</i> (JDP with SDSU) Advisor: Satish Sharma	2017	Frank Bergmann <i>An Integrative Approach to Modeling in Systems Biology</i> (JDP with KGI) Advisor: Ali Nadim	2010
Eunsil Baik <i>Dynamics of Two Components Bose-Einstein Condensates</i> (JDP with SDSU) Advisor: Ellis Cumberbatch	2012	Nadia Bernardo Mendoza <i>Evaluation of Imputation Methods Focusing on Categorical Outcomes</i> (JDP with SDSU) Advisors: Barbara Bailey and Chii-Dean Lin	2023
David Torres Barba <i>Assessment of Functional Activity in Isolated Cardiomyocytes using Computational Methods</i> (JDP with SDSU) Advisor: Paul Paolini	2011	Eric Besnard <i>Prediction of High Lift Flows with Separation</i> (JDP with CSULB) Advisor: Tuncer Cebeci	1997
Maximilian Baroi <i>An Exponential Formula for Random Variables Generated by Multiple Brownian Motions</i> Advisor: Henry Schellhorn	2022	Ashish Bhan <i>Structure of Gene Expression Networks Derived from Microarray Time Series Data</i> Advisor: Greg Dewey	2004
Carlos Bazán <i>PDE-Based Image and Structure Enhancement for Electron Tomography of Mitochondria</i> (JDP with SDSU) Advisor: Peter Blomgren	2009	Nasima Bhuiyan <i>Towards Performance Measure Analysis: Development of a Left Turn Saturation Flow Rate Model at Signalized Intersections</i> (JDP with CSULB) Advisor: Emelinda Parentela	2018
Joseph Beasley <i>Performance Feedback and Control of Solar Concentrators using Wave Front Sensing Techniques</i> (JDP with CSULB) Advisors: Hen-Geul Yeh and Greg Dewey	2008	Joris Billen <i>Simulated Associating Polymer Networks</i> (JDP with SDSU) Advisor: Arlette Baljon	2012
Joshua Beemer <i>Ensemble Learning Methods for Educational Data Mining Applications</i> (JDP with SDSU) Advisor: Richard A. Levine	2020	David Atwood Bliss <i>Periodic Boundary Value Problems and the Dancer-Fucik Spectrum Under Conditions of Resonance</i> Advisor: Adolfo Rumbos	2012

Angel Boada Velazco <i>High Order Mimetic Finite Differences on Non-Trivial Problems</i> (JDP with SDSU) Advisor: José Castillo	2021	William Ceely <i>Mathematical Modeling of Microscale Biology in Polyelectrolyte Brushes</i> Advisors: Marina Chugunova and Ali Nadim	2024
Theodoros Spyridon Bolis <i>Differentiable Nuclear Manifolds</i> Advisor: Robert James	1971	Juan Cepeda-Rizo <i>Solid and Fluid Mechanics Case Studies in Advanced Electronic Packaging</i> (JDP with CSULB) Advisor: Hsien-Yang Yeh	2006
Jeremy Bonifacio <i>Oscillatory Flow Driven by Cavity</i> (JDP with CSULB) Advisor: Hamid Rahai	2019	Dwayne Chambers <i>Topological Symmetry Groups of Complete Graphs</i> Advisor: Erica Flapan	2011
Minh Bui <i>Linear Phase Orthogonal Filter Bank Constructions with Applications to Image and Geometric Approximations</i> (JDP with CSULB) Advisor: Nick Panagiotacopoulos	2005	Nicolas Chaumont <i>From Brains to Populations: Modeling Animal Interactions with their Environment</i> (JDP with KGI) Advisor: Animesh Ray	2014
David Caballero <i>Discrete Variable Representation of the Angular Variables in Quantum Three-Body Scattering</i> (JDP with CSULB) Advisor: Alfonso Rueda	2011	Xiaoyu Che <i>Joint Modeling and Analysis of Recurrent and Terminal Events</i> Advisor: John Angus	2013
Todd Cadwallader-Olsker <i>Proof Schemes and Proof Writing</i> Advisor: John Angus	2007	Paul O. Chelson <i>Quasi-Random Techniques for Monte Carlo Methods</i> Advisor: Jerome Spanier	1976
Peter Calhoun <i>Novel Random Forest and Variable Importance Methods for Clustered Data</i> (JDP with SDSU) Advisor: Juanjuan Fan	2017	Aisha Chen <i>Gait and Postural Analysis in Healthy Young Adults and People with Parkinson's Disease</i> (JDP with CSULB) Advisors: Shadnez Asgari and Deenila Karishnan	2019
Karen Campbell <i>SEIRscape, an Agent-Based Mosquito-Human Virus Basis of Dengue Risk across Peru and Thailand</i> (JDP with CSULB) Advisor: C. D. Lin	2017	Jerry Chen <i>Role of the MicroRNA miR-124 in the Regulatory Network Governing PNS Development in <i>Ciona Intestinalis</i></i> (JDP with SDSU) Advisor: Robert Zeller	2013
Vito Cantu Alessio Robles <i>Machine Learning Methods for the Analysis of Metagenomes</i> (JDP with SDSU) Advisor: Robert Edwards	2020	Yuan Chen <i>Free Market on the Freeway</i> Advisor: Henry Schellhorn	2019
Ronald Caplan <i>Study of Vortex Ring Dynamics in the Nonlinear Schrodinger Equation Utilizing GPU-Accelerated High-Order Compact Numerical Integrators</i> (JDP with SDSU) Advisor: Ricardo Carretero	2012	Aisha Najera Chesler <i>Non-Linear Analysis and Modeling of FHR and ECOG: Predicting Fetal Distress in Labor</i> Advisor: Ami Radunskaya	2015
		Michael R. Chiaro	1977

Patrick Choi <i>Optimization of the Principal Eigenvalue of an Elliptic Operator with Application to Heat Conductor</i> Advisor: Chiu-Yen Kao	2016	An Do Dela <i>Multi-Scale Modeling and Sensitivity Analysis in Biological Systems</i> Advisor: Blerta Shtylla	2021
Todd Coburn <i>Optimization: Nurbs and the Quasi-Newton Method</i> (JDP with CSULB) Advisor: Ortwin Ohtmer	2010	Vladimir Delengov <i>Computing Eigenmodes of Elliptic Operators on Manifolds Using Radial Basis Functions</i> Advisor: Chiu-Yen Kao	2018
Cherlyn Lee Converse <i>Lower Bounds for the Maximum Number of Stable Pairings for the General Marriage Problem Based on the Latin Marriage Problem</i> Advisor: Henry A. Krieger	1992	Johnny Corbino Delgado <i>SubFlow: Simulating Geological Storage of CO2 Using Mimetic Operators</i> (JDP with SDSU) Advisor: José Castillo	2018
Kevin Cotton <i>Measuring Machine Learning Model Uncertainty with Applications to Aerial Segmentation</i> Advisor: Allon Percus	2021	Kameryn Denaro <i>Quantifying Disease Severity of Cystic Fibrosis Using Linear Quantile Mixed Models</i> (JDP with SDSU) Advisor: Barbara Bailey	2016
Daniel Cuevas <i>Bridging the genomic gaps: genome-scale metabolic network tools for bioinformatics analyses</i> (JDP with SDSU) Advisor: Robert Edwards	2018	Monica de Pass <i>Wavelet Feature Extraction of High-Range Resolution Radar Profiles using Generalized Gaussian Distributions for Automatic Target Recognition</i> Advisor: John Angus	2006
Jack M. Cuzick <i>On the Moments of the Number of Curve Crossings by a Stationary Gaussian Process</i> Advisor: Jerome Spanier	1976	Yujia Ding <i>On Heavy-Tailed Distributions and Big Data</i> Advisors: John Angus, Qidi Peng, and Weiqing Gu	2021
Yousef Daneshbod <i>Mathematical Models in Microfluidics: Capillary Electrophoresis and Sessile Drop Physics</i> Advisor: Ali Nadim	2006	Son Doan <i>Optimization in Engineering Applications</i> (JDP with CSULB) Advisor: Hen-Geul Yeh	2020
Tuan Dao <i>Solving the Prandtl Boundary Layer Equation in Fluid Dynamics via Non-Linear Numerical Optimization</i> (JDP with CSULB) Advisors: Christiane Beyer and Ali Nadim	2019	Christina Durón <i>The Distribution of Betweenness Centrality in Exponential Random Graph Models</i> Advisors: Ami Radunskaya and Johanna Hardin	2019
Paul David <i>A Riemannian Quotient Structure for Correlation Matrices with Applications to Data Science</i> Advisor: Weiqing Gu	2019	Mohamed Osman El-Doma <i>Analysis of Nonlinear Integra-Differential Equations Arising in Age-Dependent Epidemic Models</i> Advisor: Stavros Busenberg	1986
Dany De Cecchis <i>Development of a Parallel Coupler Library with Minimal Inter-Process Synchronization for Large-scale Computer</i> (JDP with SDSU) Advisor: José Castillo	2012	Omer Eljairi <i>Preliminary Study of Highway Pavement and Materials</i> (JDP with CSULB) Advisor: Shadi Saadeh	2020

Azzam Elshihabi 1997 <i>Disturbance Decoupling with Stability for Nonlinear Systems using Static/Output Feedback: A Geometric Approach</i> (JDP with CSULB) Advisor: Fumio Hamano	Samuel H. Fryer 1988 <i>Mathematical Models of Typhoid Fever</i> Advisor: Kenneth L. Cooke
Luis Waldo Escalona Galvis 2020 <i>Guided Wave Actuation for Enhanced Damage Identification in Carbon Fiber Reinforced Polymer Material Using Electrical Resistance Tomography</i> (JDP with SDSU) Advisor: Satchi Venkataraman	Mariangel Garcia 2016 <i>Data Assimilation Unit for the General Curvilinear Environmental Model</i> (JDP with SDSU) Advisor: José Castillo
Mohammad (Al Ahmad) Eyadat 2003 <i>Comparative Performance Evaluation of Practical Digital Watermark Embedded Schemes</i> (JDP with CSULB) Advisors: Samir Chatterjee, Ali Nadim, and Dar-Biau Liu	Cristina Garcia-Cardona 2013 <i>Multiclass Learning on Graphs: Diffuse Interface Models and Beyond</i> (JDP with SDSU) Advisors: Allon Percus and Arjuna Flenner (NAWS China Lake)
Weifu Fang 1990 <i>Identification of Transistor Contact Resistivity</i> Advisors: Ellis Cumberbatch and Stavros Busenberg	Scott Gasner 2006 <i>Cellular Pattern Formation and Noise in $O(2)$ Symmetric Systems</i> Advisor: Peter Blomgren
Katherine Fedorchuk 2005 <i>Condensed History Methods for Monte Carlo Solutions of Photon Transport Problems</i> Advisor: Jerome Spanier	Ruben Jeffrey Glueck 2013 <i>Pseudo-Spectral and Kronecker Product Methods for Fourth Order Partial Differential Equations</i> Advisor: Ali Nadim
Jennifer Flenner 2017 <i>Deep Non-Negative Matrix Factorization</i> Advisor: Blake Hunter	Chris Giles Graham 1996 <i>Cooperative Solution Concepts for Multi-Sided Assignment Games</i> Advisor: William F. Lucas
Maxwell Forst 2023 <i>Lattice Extensions and Zeros of Multilinear Polynomials</i> Advisor: Lenny Fukshansky	Gregory Green 1992 <i>Confidence Bounds on Functions of Parameters</i> Advisor: Janet Myhre
Jordan Fox 2022 <i>Data-driven Methods for Low-Energy Nuclear Theory</i> (JDP with CSULB) Advisor: Calvin Johnson	Zhengji Guo 2019 <i>A Full Asymptotic Series of European Call Option Prices in the SABR Model with $\beta = 1$</i> Advisor: Henry Schellhorn
Michael B. Franklin 2013 <i>Electrowetting-Based Microfluidics: Modeling and Simulation</i> Advisor: Ali Nadim	Saeideh Khadem Haghighian 2024 <i>Transformer-Less Common Grounded Nine-Level Grid-Connected Boost Inverter for PV Panels</i> (JDP with CSULB) Advisor: Hen-Geul Yeh
Michael E. Frantz 1995 <i>On the Interaction of a Cold Front with a Mountain Ridge</i> Advisor: Ellis Cumberbatch	Melodie Hallett 2015 <i>Novel Random Forest and Variable Importance Methods for Correlated Survival Data, with Applications to Tooth Prognosis</i> (JDP with SDSU) Advisor: Juanjuan Fan
Jesse Peter Frumkin 2012 <i>Induction of Chromosome Instability by Gene Dosage and Over-Expression in <i>Saccharomyces Cerevisiae</i></i> (JDP with KGI) Advisor: Animesh Ray	

Hamza Abid-ali Hamza 1997 <i>Multi-Person Cooperative Games: The Nucleoli Approach Assignment Games</i> Advisor: William F. Lucas	Alexander Holland 2019 <i>Modeling and Analysis of Quasi-periodic Signals with Application to Hemodynamics</i> (JDP with CSULB) Advisors: Ali Nadim and Shadnaz Asgari
Elsa Harris 2024 <i>A Smart Energy-Efficient Hybrid Gait Monitoring System</i> (JDP with CSULB) Advisor: Emel Demircan	Christopher Hovick 2002 <i>Statistical and Structural Dynamic Analysis of the Dearthman Perimeter Measure of Tooth and Implant and Damping Capacity</i> (JDP with CSULB) Advisors: Ortwin Ohtmer and John Angus
Carole Hayakawa 2001 <i>Perturbation Monte Carlo Methods for the Solution of Inverse Problems</i> Advisor: Jerome Spanier	Wenzhang Huang 1990 <i>Studies in Differential Equations and Applications</i> Advisor: Kenneth L. Cooke
Lingjun He 2016 <i>Semiparametric Varying-Coefficient Mixed Effects Modeling Approaches to Longitudinal Data</i> (JDP with SDSU) Advisor: Jianwei Chen	Alice A. Huffman 1975 <i>Lifting Isomorphisms Between k-Ideals of ϕ-Algebras</i> Advisor: Melvin Henriksen
Shuan He 2019 <i>QoE Driven Multimedia Service Schemes in Wireless Networks Resource Allocation: Evolution from Optimization, Game Theory, to Economics</i> (JDP with SDSU) Advisor: Wei Wang	(Anthony) Kwok Hui 2009 <i>Risk Analysis of Software Development using Bayesian Belief Network and Non-Linear Programming Methods</i> (JDP with CSULB) Advisors: Dar-Biau Liu and Alpan Raval
David Heckman 2014 <i>Variations on Markov Chain Monte Carlo Methods: Continuous and Discrete Optimization of Scheduling Problems</i> Advisor: Alpan Raval	Vigen Isayan 2010 <i>t-copula Based Credit Risk Modeling in a Network Economy</i> Advisor: Henry Schellhorn
Susan Kay Herring 1992 <i>Statistical Tests for Stochastic Dominance</i> Advisor: Henry A. Krieger	Thomas E. Iverson 1975 <i>Extensions of the Theory of the Fractional Calculus with an Application</i> Advisor: Jerome Spanier
Daniel Herrlin 2016 <i>Forecasting MLB Performance Utilizing a Bayesian Approach in Order to Optimize a Fantasy Baseball Draft</i> (JDP with SDSU) Advisor: Richard Levine	Afroz Jahedi 2020 <i>Novel Random Forest Methods and Algorithms for Autism Spectrum Disorders Research</i> (JDP with SDSU) Advisors: Ralph A. Muller and Juanjuan Fan
Huy Hoang 2002 <i>Experimental and Numerical Investigations of Steady Turbulent Jets from Round Ribbed Tubes</i> (JDP with CSULB) Advisor: Hamid Rahai	Sammuel Jalali 2012 <i>A New Approach in Blind Equalization of Multipath Wireless Channels</i> (JDP with CSULB) Advisor: Rajendra Kumar
Uyen Hoang 2019 <i>Applications of Machine Learning in Cancer Prediction: Renal Cell Carcinoma and Glioblastoma Multiforme</i> (JDP with SDSU) Advisor: Usha Sinha	Saeid Janani 2020 <i>Numerical Simulations of Multi-Confined Jets in Crossflow at Supercritical Pressure</i> (JDP with CSULB) Advisor: Hamid Rahai

Zhixuan Jia <i>Optimization and Machine Learning Applied to Inverse Problems in Partial Differential Equations</i> Advisors: Ali Nadim and Marina Chugunova	2023	Darin Koblick <i>Re-Purposing the Advanced Solar Photon Thruster as a Constellation of Solar Reflectors to Track Debris in Geosynchronous Earth Orbit</i> (JDP with CSULB) Advisor: Praveen Shankar	2017
Sixian Jin <i>Martingale Representation Theorems Based on Malliavin Calculus</i> Advisor: Henry Schellhorn	2017	David Kogan <i>On Coherence and the Geometry of Certain Families of Lattices</i> Advisor: Lenny Fukshansky	2022
Casey Johnson <i>Spectral Analysis of Complex Dynamical Systems</i> Advisor: Marina Chugunova	2020	Rong Kong <i>Transport Problems and Monte Carlo Methods</i> Advisor: Jerome Spanier	1999
Kevin Joiner <i>Modeling Phage-Bacteria Dynamics in Mucus: An Agent Based Approach to Phage Therapy</i> (JDP with SDSU) Advisor: Antoni Luque	2018	Yongzeng Lai <i>Monte Carlo and Quasi-Monte Carlo Methods and their Applications</i> Advisor: Jerome Spanier	1999
Richard L. Jow <i>Some Contributions to the Theory of Random Sets</i> Advisor: Richard Vitale	1983	John Patrick Lambert <i>Some Developments in Optimal and Quasi-Monte Carlo Quadrature and a New Outlook on a Classical Chebyshev Problem</i> Advisor: Jerome Spanier	1982
Khalil Antoun Kairouz <i>Numerical and Experimental Investigations of a Turbulent Junction Flow with Upstream Ribbed Surface</i> (JDP with CSULB) Advisor: Hamid R. Rahai	2002	Suzanne L. Larson <i>Convexity Conditions on a Class of Lattice Ordered Rings</i> Advisor: Melvin Henriksen	1984
Martin Kandes <i>Modeling the Effects of Inertial Forces on Bose-Einstein Condensates in Rotating Frames of Reference</i> (JDP with SDSU) Advisor: Ricardo Carretero	2016	Eugene Lavretsky <i>Neural Networks for Function Approximation and Control System Design</i> Advisor: Robert Williamson	1999
Di Kang <i>Modeling and Analysis of Thin Viscous Liquid Films in Spherical Geometry</i> Advisors: Ali Nadim and Marina Chugunova	2018	Hieu Le <i>A Method to Detect Single and Multiple Delamination Problems using a Combined Neural Network Technique and Genetic Algorithm Optimization</i> (JDP with CSULB) Advisor: Ellis Cumberbatch	2004
Priscilla Kelly <i>Ultrashort Pulse Shaping Multilayered Aluminum-doped Zinc Oxide Metamaterials</i> (JDP with SDSU) Advisor: Lyuba Kuznetsova	2019	Sunny Le <i>Examining Course Achievement in an Undergraduate Psychology Statistics Course through the Lens of Machine Learning Techniques</i> Advisors: John Angus and David Drew	2024
Alice M. King	1975		
Gene Ko <i>Computational Approaches for Descriptor Optimization and Model Development for HIV-1 Drug Design</i> (JDP with SDSU) Advisor: Sunil Kumar	2015		

Jeffrey Ledahl 2016 <i>Bayesian Joint Modeling of Longitudinal Visual Field Data with Correlated Binary and Survival Outcomes</i> (JDP with SDSU) Advisor: Richard Levine	Shinen Lo 2012 <i>A Fire Spread Model Using Level Set Methods</i> (JDP with CSULB) Advisor: Burkhard Englert
Diana Lee 2024 <i>Reaching Across the Divide: Tools for Bridging Structural and Viral Genomics using a Combination of Biophysical Principles and Machine Learning</i> (JDP with SDSU) Advisor: Antoni Luque	Patrick Longhini 2005 <i>Nonlinear Dynamics Design and Operation of Advanced Magnetic Sensors</i> (JDP with SDSU) Advisor: Antonio Palacios
Kimberly Leung 2016 <i>Stochastic Models for Precipitable Water in Convection</i> (JDP with SDSU) Advisor: Samuel Shen	Gabriel Lopez-Garza 2003 <i>Resonance and Strong Resonance for Semilinear Elliptic Equations in RN</i> Advisor: Adolfo Rumbos
Steve Lewis 2007 <i>Bayesian Parameter and Order Estimation in Profile Hidden Markov Models</i> Advisor: Alpan Raval	Haisheng Luo 1995 <i>Curve Estimation and Graduation</i> Advisor: John Angus
Liming Li 1995 <i>Quasi-Monte Carlo Methods for Transport Equations</i> Advisor: Jerome Spanier	Barry Luong 2003 <i>Evaluation Modeling in Performance and Resource Allocation for Residential Broadband Gateways</i> (JDP with CSULB) Advisor: John Angus
Luo Li 2020 <i>Causal Effect Random Forest of Interaction Trees for Learning Individualized Treatment Regimes in Observational Studies: With Applications to Education Study Data</i> (JDP with SDSU) Advisor: Juanjuan Fan	José Alberto Luzardo-Flores 1997 <i>Neural Networks for Approximation and Control of Continuous Time Nonlinear Systems</i> (JDP with CSULB) Advisor: A. G. Chassiakos
Alfonso Limon 2009 <i>A Multilevel Framework for PDEs whose Solution Exhibits Fast Transitions</i> (JDP with SDSU) Advisor: Ellis Cumberbatch	Anna Ma 2018 <i>Stochastic Iterative Algorithms for Large-scale Data</i> (JDP with SDSU) Advisor: Deanna Needell
Aggie Gloria Ho Liu 1978 <i>Trees, Tree-Like Structures, and Extreme Points in Banach Spaces</i> Advisor: Robert James	José Macias 1998 <i>An Approximation Method for Solving Non-Homogeneous Wave Equations and Related Inverse Problems</i> Advisor: Ellis Cumberbatch
Chen Liu 2016 <i>Monte Carlo Algorithms for American Option Pricing: An Analysis of Convergence Rates and the Application for Backward Taylor Expansion on Variance Reduction Techniques</i> Advisor: Henry Schellhorn	Earl H. Maize 1981 <i>Contributions to the Theory of Error Reduction in Quasi-Monte Carlo Methods</i> Advisor: Jerome Spanier
Zheng Liu 2014 <i>A Bond Option Pricing Formula in the Extended CIR Model</i> Advisor: Henry Schellhorn	Barah Makhdum 2023 <i>Dynamics and Equilibria of N Point Charges on a 2D Ellipse or a 3D Ellipsoid</i> Advisor: Ali Nadim

Kun Marhadi 2010 <i>Investigation of Progressive Failure Robustness and Alternate Load Paths for Damage Tolerant Structures</i> (JDP with SDSU) Advisor: Satchi Venkataraman	Hai Ah Nam 2010 <i>Ab Initio Nuclear Shell Model Calculations of Some Light Nuclei with a Three-Nucleon Force</i> (JDP with SDSU) Advisor: Calvin Johnson
Sean Matz 2020 <i>Detection and Localization of Linear Features Based on Image Processing Methods</i> Advisor: Marina Chugunova	Hareshram Natarajan 2020 <i>High Order Explicit Semi-Lagrangian Method for the Solution of Lagrangian Transport and Stochastic Differential Equations</i> (JDP with SDSU) Advisor: Gustaaf Jacobs
Philip W. McCartney 1978 <i>On Some Banach Space Properties Related to the Radon-Nikodým Property</i> Advisor: Robert James	Rafael Navarro 2012 <i>Dynamical Properties of Bose-Einstein Condensates</i> (JDP with SDSU) Advisor: Ricardo Caretero
Matthew Michal 2016 <i>Analytical and Numerical Analysis of Lubrication Coating Flow Models</i> Advisor: Marina Chugunova	Rodrigo Negreiros 2010 <i>Numerical Study of the Properties of Compact Stars</i> (JDP with SDSU) Advisor: Fridolin Weber
Raymond Moberly 2012 <i>Quantization of a Low-Density Parity-Check (LDPC) Decoder</i> (JDP with SDSU) Advisor: Michael E. O'Sullivan	Dan Manh Nguyen 2002 <i>An Unified Automated Approach to Surface Approximation via Finite Element and Non Uniform Rational B-spline Methods</i> (JDP with CSULB) Advisors: Ortwin Ohtmer and Ellis Cumberbatch
Jeffrey Louis Molony 1997 <i>Studies of the Geometric Theory: Nonlinear Dynamical Systems</i> Advisor: Courtney Coleman	Dong Nguyen 2000 <i>Reliability Modeling and Evaluation in Computer Networks and Distributed Systems</i> (JDP with CSULB) Advisors: John Angus and Dar-Biau Liu
Hana Moshirvaziri 2019 <i>Prediction of the Outcome in Cardiac Arrest Patients Undergoing Hypothermia Using EEG Wavelet Entropy</i> (JDP with CSULB) Advisor: Shadnaz Asgari	Huu Nguyen 2018 <i>Efficient Digital Image Reconstruction/Restoration Using a Novel Application of Markov Random Fields</i> Advisor: John Angus
Imad Muhi El-Ddin 2009 <i>Watermarking Schemes Robust against Affine Attacks: Applied Mathematics, An Application of Digital Image Processing in Information Technology</i> Advisor: Hedley Morris	James Nguyen 2009 <i>A Hardware Implementation of the Level Set Method for Robotic Path Finding with Multiple Obstacle Avoidance</i> (JDP with CSULB) Advisor: Ali Nadim
Ionela Munayco 2022 <i>An Iterative Method for Canonical Polyadic Decomposition of Tensors</i> Advisors: Ali Nadim, Marina Chugunova, and Lorne Olfman	Tien Manh Nguyen 1995 <i>Mathematical Modeling and Digital Signal Processing Techniques for Modern Digital Communication Systems</i> (JDP with CSULB) Advisor: Hen-Geul Yeh
Susan Nachawati 2013 <i>DNA Visualization with Sacks Spiral Method: An Application in Genomic Engineering</i> (JDP with CSULB) Advisor: Forouzan Golshani	Kieran Nolan 2009 <i>Meta-Scheduling of Level-Set Methods in a Grid Computing Environment</i> (JDP with CSULB) Advisors: Dar-Biau Liu and Ali Nadim

Giray Ökten 1997 <i>Contributions to the Theory of Monte Carlo and Quasi-Monte Carlo Methods</i> Advisor: Jerome Spanier	Carlos Orrala Poveda 2004 <i>Numerical and Experimental Investigations of Two Side-by-Side Turbulent Jets in a Cross Flow</i> (JDP with CSULB) Advisor: Hamid R. Rahai
Kim Joseph Olszewski 1998 <i>Concatenated Reed-Solomon and Reed-Muller Codecs with Blind Adaptation for CDMA Antenna Array Systems</i> (JDP with CSULB) Advisor: R. Kumar	Jerry Emmett Purcell 1995 <i>Allpass Filters</i> (JDP with CSULB) Advisor: Ellis Cumberbatch
Fred Ovadia 1978 <i>Contributions to the Theory of Fractional Difference Operators</i> Advisor: Jerome Spanier	Saravana Raman 2017 <i>Simulation of Plethysmographic Environment in Pulmonary Function Studies</i> (JDP with CSULB) Advisor: Christopher Druzgalski
Seethal Paluri 2016 <i>Cross-Layer Schemes for Enhancing H.264/AVC Video Quality over Wireless Channels</i> (JDP with SDSU) Advisor: Sunil Kumar	Claudia Rangel Escareno 2003 <i>Modeling Biological Responses Using Gene Expression Profiling and Linear Dynamical Statistical Models</i> Advisors: John Angus and David Wild (KGI)
Wen Pan 2019 <i>Data Management on Non-volatile Memory: from Mobil Applications to Large-scale Databases</i> (JDP with SDSU) Advisor: Tao Xie	Nan Rao 2019 <i>Cluster Analysis on Stochastic Processes</i> Advisors: Qidi Peng and Allon Percus
Christopher Paolini 2007 <i>A Service-Oriented Architecture for Thermochemical Computation</i> (JDP with SDSU) Advisor: Subrata Bhattacharjee	Leandro Recova 2014 <i>Applications of Morse Theory to Semilinear Elliptic Boundary Value Problems</i> Advisor: Adolfo Rumbos
Jeho Park 2009 <i>Applications of Cluster Systems</i> (JDP with CSULB) Advisor: John Angus	Norman Richert 1981 <i>Diophantine Approximation of Complex Numbers</i> Advisor: Jerome Spanier
Moein Parsinia 2019 <i>Distributed Mode Selection and Cross-layer Routing Protocol for FDD Nodes in Mobile Ad Hoc Networks</i> (JDP with SDSU) Advisor: Sunil Kumar	Beltran Rodriguez-Brito 2010 <i>A Metagenomic Examination of a Solar Saltern in Southern California</i> (JDP with SDSU) Advisor: Forest Rohwer
Julien Pierret 2018 <i>Climate Data Computing: Optimal Interpolation, Averaging, Visualization and Delivery</i> (JDP with SDSU) Advisor: Samuel Shen	Otilio Rojas Ulacio 2009 <i>Modeling of Rupture Propagation under Different Friction Laws using High-Order Mimetic Operations</i> (JDP with SDSU) Advisors: Steven Day and José Castillo
Claudia L. Pinter 1987 <i>The Average Error from the Approximation of Functions and Integrals</i> Advisor: Robert Williamson	Julia Rossi 2016 <i>Non-Conservative Variational Approximation for Nonlinear Schrodinger Equations and its Applications</i> (JDP with CSULB) Advisor: Hamid Rahai
	Mary Royston 1995 <i>Three-Sided Assignment Games</i> Advisor: William F. Lucas

Yadong Ruan <i>Modeling and Analysis of Falling Liquid Films</i> Advisors: Ali Nadim and Marina Chugunova	2020	John Sepikas <i>Enhanced Lattice Methods for High Dimensional Quadrature Applications</i> Advisor: Jerome Spanier	2011
Eduardo Sanchez <i>Mimetic Finite Differences and Parallel Computing to Stimulate Carbon Dioxide Subsurface Mass Transport</i> (JDP with SDSU) Advisor: José Castillo	2015	Lucie Sharpsten <i>Predicting Glaucoma Progression Using Random Forests for Correlated Binary Response Based on Longitudinally Collected Standard Automated Perimetry Data</i> (JDP with SDSU) Advisor: Juanjuan Fan	2013
Thomas R. Savage <i>On Some Problems in the Theory of Von Neumann Regular Rings</i> Advisor: Melvin Henriksen	1997	Jody Hewychun Shu <i>Autonomous Voice and Motion Controlled Video Camera System for Instructional Technology</i> (JDP with CSULB) Advisor: John Angus	2013
Robert Armin Schmieder <i>A Framework for Identifying Antibiotic Resistance in the Human Microbiome</i> (JDP with SDSU) Advisor: Robert Edwards	2012	Genivaldo Silva <i>Who is There and What are They Doing? An Agile and Computationally Efficient Framework for Genome Discovery and Annotation from Metagenomic Big Data</i> (JDP with SDSU) Advisor: Robert Edwards	2017
Adeline Schmitz <i>Constructive Neural Networks for Function Approximation and their Application to CFD Shape Optimization</i> (JDP with CSULB) Advisor: Hamid Hefazi	2007	Colette Smirniotis <i>Transformation and Parameterization in LatticeKrig</i> (JDP with SDSU) Advisor: Barbara Bailey	2018
Nathan Schroeder <i>Steklov Eigenvalue Problems on Nearly Spherical and Annular Domains</i> Advisor: Chiu-Yen Kao	2024	Jean Suarez Solano <i>Regularization of Singular Sources for PSIC Computations of Particle-Laden Flows with Shocks</i> (JDP with SDSU) Advisor: Gustaaf Jacobs	2015
Henry J. Schultz <i>Banach and Frechet Algebras of Power Series</i> Advisor: Sandy Grabiner	1974	Xiaojia Song <i>Accelerating Data Center Applications through Energy-Efficient Reconfigurable Computing: from Near-Data Processing to Data-Access Reduction</i> (JDP with SDSU) Advisor: Tao Xie	2019
Micah Schuster <i>Systematic Investigation of Operators in Nuclear Systems</i> (JDP with SDSU) Advisor: Calvin Johnson	2015	William Spinella <i>A Systematic Investigaton of Exotic Matter in Neutron Stars</i> (JDP with SDSU) Advisor: Fridolin Weber	2017
Pouye Sedighian <i>Investigation of Neutrophil-Like HL-60 Cell Migration in a 3D Collagen Matrix</i> (JDP with CSULB) Advisor: Perla Ayala	2022	Xun Sun <i>On the Geometry of Cyclic and Permutation Invariant Lattices</i> Advisor: Lenny Fukshansky	2015
Sarun Seepun <i>Adaptive Stride Convolutional Neural Networks</i> Advisor: Allon Percus	2021	Hiroki Sunahata <i>Interaction of the Quantum Vacuum with an Accelerated Object and its Contribution to Inertia Reaction Force</i> (JDP with CSULB) Advisor: Alpan Raval	2006
Victor Seguritan <i>Neural Network Predictions of Protein Function</i> (JDP with SDSU) Advisor: Anca Segall	2013		

Justin Sunu <i>Graph-Based Acoustic Clustering and Classification</i> (JDP with SDSU) Advisor: Allon Percus	2023	Kristy Tran <i>Stochastic Optimization Powered by Markov Chain Monte Carlo: Mixed-Integer Nonlinear Programming for Communications Network Scheduling</i> (JDP with CSULB) Advisor: Fumio Hamano	2019
Jennifer Switkes <i>The Geographic Mosaic Theory in Relation to Coevolutionary Interactions between Two Species</i> Advisor: Michael Moody	2000	Phuong Yen Thi Tran <i>Asymptotic Reliability of the Hypercube and the D-Octahedral Networks</i> Advisor: William F. Lucas	1996
Shahab Taherian <i>Computational Fluid Dynamics Analyses of Ambient Particle Deposition in the Human Respiratory System and Virus Transport Abroad a Regional Aircraft</i> (JDP with CSULB) Advisor: Hamid Rahai	2015	John C. Tripp <i>Multiplications on Banach Spaces</i> Advisor: Sandy Grabiner	1975
Siddhi Tavildar <i>Inferring Undirected and Causally Directed Graph Structures from Multivariate Time Series</i> (JDP with SDSU) Advisor: Ashkan Ashrafi	2020	Gregg Turner <i>Spectral Conditions for Oscillations and Stabilization of Systems of Differential Equations with Piecewise Constant Arguments</i> Advisor: Kenneth Cooke	1991
Allen Teagle-Hernandez <i>Very Efficient Numerical Solutions via the "Mehrstellen" Method in 1D, 2D, and 3D for Complex Differential Equations Demonstrated for Acoustics and Related Fields</i> (JDP with CSULB) Advisor: Ellis Cumberbatch	2013	James Turtle <i>Synchronization in Coupled Spin-Torque Nano Oscillators: Nonlinear Dynamics Analysis</i> (JDP with SDSU) Advisor: Antonio Palacios	2016
Ali Fadaei Tehrani <i>Performance and Capacity Improvement in Power Line and Wireless Communications Systems</i> (JDP with CSULB) Advisor: Hen-Geul Yeh	2019	Manuel Valera <i>Mimetic Coastal Ocean Modeling in General Coordinates and using Machine Learning Based Predictions</i> (JDP with SDSU) Advisor: José Castillo	2021
Ying Teng <i>Modeling and Simulation of Aeroservoelastic Control with Multiple Control Surfaces Using μ-Method</i> (JDP with CSULB) Advisor: H. P. Chen	2005	Timothy Vanderbeek <i>Analysis and Optimization of Chassis Movements in Transportation Networks with Centralized Chassis Processing Facilities</i> (JDP with CSULB) Advisor: Anastasios Chassiakos	2019
Mary Thomas <i>Parallel Implementation of the Curvilinear Ocean and Atmospheric (UCOAM) Model and Supporting Computational Environment</i> (JDP with SDSU) Advisor: José Castillo	2014	Esteban Vazquez-Hidalgo <i>Force Regulation in Contractile Cells by Chemical and Mechanical Signaling</i> (JDP with SDSU) Advisor: Parag Katira	2021
Duc Tran <i>Model Predictive Energy Management for Building Microgrids with IoT-based controllable Loads</i> (JDP with CSULB) Advisor: Masoud Nazari	2019	Jorge Xicotencatl Velasco-Hernandez <i>Models of Chagas' Disease : Stability, Thresholds and Asymptotic Behavior</i> Advisor: Stavros Busenberg	1991

Diana W. Verzi <i>A Mathematical Description of Diagrammatic Models for Structural Changes in Dendritic Spines</i> Advisors: Ellis Cumberbatch and Steve Baer (ASU)	2001	Jonathan Louis Wilson <i>Advancements in the Elicitation, Aggregation, and Forecasting of Probability Distributions Under Time Constraints</i> (JDP with SDSU) Advisor: Kristin Duncan	2013
Minaya Villasana de Villagas <i>A Delay Differential Equation Model for Tumor Growth</i> Advisor: Ami Radunskaya	2001	Mark Wilson <i>Structure and Rheological Properties of Self-Associating Polymer Networks</i> (JDP with SDSU) Advisor: Arlette Baljon	2015
Michael Vodhanel <i>Problems in GPS Accuracy</i> Advisor: John Angus	2011	Tina Woolf <i>Practical Compressed Sensing</i> Advisor: Deanna Needell	2017
Rudolf Volz <i>Global Asymptotic Stability of a Periodic Solution to an Epidemic Model</i> Advisor: Kenneth Cooke	1982	Chao-Jen Wong <i>An Embedding Method for Simulation of Immobilized Enzyme Kinetics and Transport in Sessile Hydrogen Drops</i> Advisor: Ali Nadim	2005
Huy Khanh Vu <i>A Coupled Vibratory Gyroscope Network with Bi-directional, Uni-directional, And Direct Coupling</i> (JDP with SDSU) Advisors: Antonio Palacios and Visarath In	2011	Binghui Wu <i>Integrated Semigroups of Bounded Linear Operators and their Applications to Inverse Problems</i> Advisor: Stavros Busenberg	1992
Hsi-Ching Wang <i>Z' of Gauged Baryon and Lepton Numbers at the Large Hadronic Collider</i> (JDP with CSULB) Advisor: Subhash Rajpoot	2011	Kaiqi Xiong <i>Analysis of a Class of Nonlinear Dynamical Systems and Applications to Neural Networks</i> Advisors: Jerome Spanier and Ellis Cumberbatch	1997
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Wei Wang <i>Boosting Performance and Endurance of Flash-Based Storage Systems: From Embedded Systems to Enterprise Servers</i> (JDP with SDSU) Advisor: Tao Xie	2015	Qian Xu <i>Generalized Varying-coefficient Mixed Models with Missing Data and Surrogate Information</i> (JDP with SDSU) Advisor: Jianwei Chen	2017
Yujie Wang <i>Exploring Loss Functions in Machine Learning</i> Advisor: Michael Izbicki	2024	Shujing Xu <i>Effects of History and Lift Force on Particle Trajectories in Oscillating Rotating Fluids</i> Advisor: Ali Nadim	2014
Bruce Wilcox <i>A Time Series Data Mining and Unobserved Component Modeling Approach to Credit Risk Correlation Modeling</i> (JDP with CSULB) Advisor: Fumio Hamano	2018	Rong Zablocki <i>Large-Scale Inference Incorporating Covariates and Network Dependence, with Application to Genome-Wide Association Studies</i> (JDP with SDSU) Advisor: Richard Levine	2017

Thomas M. Zacharia <i>Stochastic and Deterministic Sets</i> Advisor: Richard A. Vitale	1984	Ran Zhao <i>Essays on Credit Derivatives and Credit Risk Modeling</i> Advisor: Henry Schellhorn	2021
Peter Zajac <i>Globally Accessible Finite Element Based Web Solver for the Vibrational Schrodinger Equation and Application to HC3O and ZnCl2+</i> (JDP with SDSU) Advisor: Andrew Cooksy	2013	Deng Zhou <i>I/O Stack Optimization for Non-Volatile Memory Based Storage Systems</i> (JDP with SDSU) Advisor: Tao Xie	2017
Roja Zakeri <i>A Neural Network-Augmented Bayesian Approach to Uncertain Parameter Estimation in Nonlinear Dynamic Systems</i> (JDP with CSULB) Advisor: Praveen Shankar	2020	Ming Zhou <i>A Mathematical Analysis of Vesicle Shapes</i> (JDP with CSULB) Advisor: Hsien-Yang Yeh	2010
Sarah Zarei <i>Mathematic Modeling of Cystic Fibrosis</i> (JDP with SDSU) Advisor: Peter Salamon	2012	Bing Zhu <i>Computational Modeling and Bifurcation Analysis of Bubbling Fluidized Processes</i> (JDP with SDSU) Advisor: Antonio Palacios	2008
Ryan Zbikowski <i>Computational Approaches to the Nuclear Many-Body Problem</i> (JDP with SDSU) Advisor: Calvin Johnson	2012	Lixia Zhu <i>The Efficiency, Robustness and Carry-over under the Crossover Designs with Binary Outcomes</i> (JDP with SDSU) Advisor: Kung-Jong Lui	2018
Frederick P. Zemke <i>Subrecursive Hierarchies</i> Advisor: Alden Pixley	1975	Lu Zhu <i>First Passage Times and their Application to Credit Default Swap Pricing with Counterparty Risk</i> Advisor: Henry Schellhorn	2014
Peng Zhao <i>Novel Random Forest Methods Applied to Medical Studies</i> (JDP with SDSU) Advisor: Juanjuan Fan	2015	Omar Zubairi <i>An Investigation of Deformation of the Stellar Structure of Neutrons Stars</i> (JDP with SDSU) Advisor: Fridolin Weber	2015

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