

EDUCATION **Ph.D Candidate, Applied Math** Department of Mathematics
University of California at Los Angeles, Los Angeles, CA August 2007 - Present

Master of Science, Applied Math Department of Applied Mathematics
University of Colorado at Boulder, Boulder, CO August 2007
THESIS - A survey of methods used in analyzing EEGs

Bachelor of Arts, Psychology Department of Psychology
University of Colorado at Boulder, Boulder, CO August 2007

RESEARCH INTERESTS Dynamic Networks, Agent based modeling, Partial Differential Equations , Statistical Analysis, Numerical Analysis, Mathematical Modeling

PAPERS R. Danson, L. Smith, A. Barbaro, A. L. Bertozzi, S. Reid, G. Tita, *Geographical Influences of an Emerging Network of Gang Rivalries* In preparation

- PRESENTATIONS**
- Invited Speaker at CSU Channel Islands Graduate Seminar *Constructing Gang Rivalry Networks: An Agent-Based Modeling Approach* April 6, 2011
 - Applied Numerical Linear Algebra: 270B UCLA Course Presentation *An investigation into solving an L1 Regularization Problem Using Split Bregman* March 11, 2011
 - IPAM: Women in Mathematics Symposium, Lightning round and Poster Presentation *Geographical influences of an emerging network of gang rivalries* February 24 - 26, 2011
 - SAMSI: Dynamics Of Networks Workshop, Poster Presentation *Geographical influences of an emerging network of gang rivalries* January 10-12, 2011
 - MSRI/NCAR Summer 2010 Graduate Workshop: Mathematics of Climate Change, Workshop Project Presentation: *Data Assimilation: Particle filters* (Presented with Daniel Jordon)
 - UCLA Crime Group: Spring 2010 *Modeling Gang Violence Rivalries* (Presented with Laura Smith)

WORKSHOPS *Pacific Coast Undergraduate Math Conference* March 12, 2011 Graduate Panel

SAMSI: Dynamics Of Networks Workshop January 2011 Poster Presentation

MSRI/NCAR Summer Graduate Workshop: Mathematics of Climate Change Summer 2010 Participant

COMPUTER SKILLS

C++, MATLAB, Java

TEACHING EXPERIENCE

- Math 151a: Numerical Analysis* Spring Quarter 2011
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in class such as methods in numerically solving ODEs , iterative methods in for solving linear equations , boundary value problems, solving minimized least squares.
- Math 151b: Numerical Analysis* Winter Quarter 2011
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in class such as methods in numerically solving ODEs , iterative methods in for solving linear equations , boundary value problems, solving minimized least squares.
 - Provided students with a final, comprehensive review.
- PIC10a: Intro. to Programming with C++* Fall Quarter 2010
UCLA Department of Mathematics (Teaching Assistant)
- Conducted bi-weekly review lectures on topics covered in class such as flow control, C++ syntax, functions, pointers, and class definition and use.
 - Provided students with a final, comprehensive review.
- Math 151a: Numerical Analysis* Spring Quarter 2010
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in class such as polynomial interpolation, finite difference, numerical integration, and linear algebra.
 - Provided students with a final, comprehensive review.
- PIC10b: Intermediate Programming with C++* Winter Quarter 2010
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in that weeks class and fielded questions on related topics such as C++ classes, operator overloading, linked lists, sorting algorithms.
- Math 151a: Numerical Analysis* Fall Quarter 2009
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in class such as polynomial interpolation, finite difference, numerical integration, and linear algebra.
- PIC3: Intro. to Programming for the Social Sciences with Java* Spring Quarter 2009
UCLA Department of Mathematics (Teaching Assistant)
- Conducted weekly review lectures on topics covered in class such as flow control, Java syntax, functions, and class definition and use.
- PIC10a: Intro. to Programming with C++* Winter Quarter 2008 - Winter Quarter 2009
UCLA Department of Mathematics (Teaching Assistant)
- Conducted bi-weekly review lectures on topics covered in class such as flow control, C++ syntax, functions, pointers, and class definition and use.
- Math 1: Pre-Calculus* Fall 2007
UCLA Department of Mathematics (Teaching Assistant)

- Conducted bi-weekly review lectures on topics covered in class such as log and exponential functions, trig functions, graphing elementary functions, and word problems.