

AMELIA A. MCNAMARA

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EDUCATION

University of California - Los Angeles, Los Angeles, CA Ph.D. candidate
Field: Statistics GPA 3.90

Honors: Chancellor's Prize Summer Fellowship (2010-2011),
National Science Foundation Graduate Research Fellowship Program Honorable Mention (2012)

Macalester College, St. Paul, MN B.A. May 2010
Majors: Mathematics, English GPA 3.63

Honors: *Cum laude* honors (2010), Dean's List (Fall 2008, Spring 2009, Spring 2010), Alliss Scholarship (2007-2010), Xcel Energy Foundation Scholarship (2009-2010), Konhauser Prize for Mathematical Achievement (2010)

University of Cincinnati, Cincinnati, OH 2006-2007
College: Design, Architecture, Art and Planning (DAAP) GPA 3.80
Honors: UC|21 Scholar, National Merit Scholar

RESEARCH

Viewpoints Research Institute, Glendale, CA Summer 2013-present
Intern, Communications Design Group
· Work with VPRI team to conceptualize new tools for collaborative work
· Develop R code and packages
· Director: Alan Kay

Center for Embedded Network Sensing, Los Angeles, CA Summer 2011-present
Graduate Student Researcher, Mobilize Project
· Develop curriculum to be deployed in LAUSD public schools
· Train teachers on basic statistical concepts, use of inquiry in teaching, and basic statistical software
· Advisor: Mark Hansen

Macalester College, St. Paul, MN Summers 2009, 2010
Undergraduate Researcher, XMAC lab
· Performed numerical analysis of Turing patterns
· Advisor: Chad Topaz
· Coauthored paper: A. Catllá, A. McNamara, and C.M. Topaz. Instabilities and patterns in coupled reaction-diffusion layers, *Phys. Rev. E* 85 (2) (2012) 026215.

Institute for Mathematics and its Applications, Minneapolis, MN Summer 2009
REU Participant
· Participated in a National Science Foundation Research Experience for Undergraduates (REU)
· Studied a model and optimization for organic photovoltaic cells
· Advisors: Fadil Santosa, Tsvetanka Sendova

EMPLOYMENT

- UCLA Statistics Department**, Los Angeles, CA 2013-present
Statistics Teaching Assistant
- Led weekly discussion section for students
 - Held twice-weekly office hours
 - Assisted students' statistics and R learning
 - Graded exams and homework
- Macalester College Math Department**, St. Paul, MN 2009-2010
Applied Calculus Preceptor
- Held weekly office hours
 - Taught students calculus and R skills
 - Graded homework and projects
- Hamline University**, St. Paul, MN 2008-2010
MathMasters Tutor
- Tutored groups of ninth-grade students who were in danger of failing basic standard math exams
 - Material covered was algebra and geometry
 - Tailored work to individual students
- Macalester College Media Services**, St. Paul, MN 2007-2010
Acquisition Specialist
- Organized interlibrary loans and intralibrary reserve materials
 - Set up and ran audio-visual equipment
 - Answered phones
 - Shelved materials
 - Opened and closed department

SKILLS

Language	Conversational in Spanish
Design	Adobe suite (Illustrator, InDesign, etc.), HTML and CSS
Office	Microsoft Office suite, copy editing, proofreading
Technical Software	Matlab, Mathematica, R, Comsol, ArcGIS, Python, LaTeX, JavaScript

PAPERS

- Instabilities and Patterns in Coupled Reaction-Diffusion Layers** February 2012
Anne J. Catllá, Amelia McNamara and Chad M. Topaz *Physical Review E*

PRESENTATIONS

- Data Visualization on the Soul of the Community** August 2013
Joint Statistical Meetings *Montreal, QC*
- Model and Optimization of Organic Photovoltaic Cells** January 2010
Joint Meeting of AMS and MAA *San Francisco, CA*
- Model and Optimization of Organic Photovoltaic Cells** November 2009
Undergraduate Research Symposium, University of Chicago *Chicago, IL*

Model and Optimization of Organic Photovoltaic Cells
Macalester College

October 2009
St. Paul, MN

Model and Optimization of Organic Photovoltaic Cells
Institute for Mathematics and its Applications

July 2009
Minneapolis, MN

ADDITIONAL CONFERENCES AND WORKSHOPS ATTENDED

Eyeo Festival
Converge to Inspire

June 2013
Minneapolis, MN

Computation + Journalism Symposium
2nd Symposium on Computation + Journalism

January 2013
Atlanta, GA

Math Science Partnership Learning Network Conference
Implementation: From Vision to Impact

January 2013
Washington, DC

Interface Symposium: Future of Statistical Computing
Internet Scale Data, Flexible Modeling, and Visualization

May 2012
Houston, TX

Math Science Partnership Learning Network Conference
Framing Effective Teaching in STEM

January 2012
Washington, DC

Workshop at the Statistical and Applied Mathematical Sciences Institute
Space-Time Analysis for Environmental Mapping, Epidemiology and Climate Change

October 2009
Durham, NC

Workshop at the University of California, Berkeley
Explorations in Statistics Research

Summer 2009
Berkeley, CA

SERVICE TO DEPARTMENT, PROFESSION AND COLLEGE

Planning member, UCLA Statistics Department DataFest
Assisted in planning and executing the annual DataFest weekend-long event for undergraduates.

2012-present

Tour Coordinator, UCLA Graduate Student Orientation Planning Committee
Organized volunteer tour guides, prepared tour materials and checked routes. As a member of the committee, discussed general issues.

2012-2013

Voting Member, UCLA Graduate Resource Center Oversight Committee
Assisted in developing new strategic plan for UCLA's graduate resource center

2011-2012

Voting Member, Macalester College Honorary Degree Committee
Assisted in the determination of honorary degree recipients from the college

2010

Voting member, Macalester College Financial Affairs Commission (FAC)
The FAC is responsible for maintaining the student government's \$100,000 yearly budget

2009-2010

Department Liaison, Macalester College Math Department
Participated in monthly department meetings, provided students' perspectives to faculty

2008-2009

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

WNAR: International Biometric Society (WNAR)	2013-present
American Statistical Association (ASA)	2012-present
Society for Industrial and Applied Mathematics (SIAM)	2012-present
Association for Women in Mathematics (AWM)	2008-2010

RELEVANT COURSEWORK

Statistical

Applied Probability	UCLA	Fall 2010
Research Design, Sampling, and Analysis	UCLA	Fall 2010
Regression Analysis: Model Building, Fitting, and Criticism	UCLA	Winter 2011
Matrix Algebra and Optimization	UCLA	Winter 2011
Theoretical Statistics	UCLA	Winter 2011
Large Sample Theory	UCLA	Spring 2011
Advanced Modeling and Inference	UCLA	Spring 2011
Monte Carlo Methods for Optimization	UCLA	Spring 2011
Data and the Media Arts	UCLA	Spring 2011
Spatial Statistics	UCLA	Fall 2011
Data, Data Practices, and Data Curation I	UCLA	Winter 2012
Data, Data Practices, and Data Curation II	UCLA	Spring 2012

Mathematical

Linear Algebra	Macalester College	Fall 2007
Discrete Mathematics	Macalester College	Spring 2008
Multivariable Calculus	Macalester College	Spring 2008
Differential Equations	Macalester College	Fall 2008
Algebraic Structures	Macalester College	Spring 2009
Continuous Applied Mathematics	Macalester College	Spring 2009
Real Analysis	Macalester College	Fall 2009
Topics in Modern Algebra	Macalester College	Fall 2009
Complex Analysis	Macalester College	Spring 2010

Geographical

Urban Geography	Macalester College	Fall 2008
Introduction to Geographic Information Systems	Macalester College	Fall 2009

Computational

Statistics Programming	UCLA	Fall 2010
Computing for Data Analysis	Coursera	Fall 2012
Programming Media	UCLA	Fall 2012
Computer Programming Languages and Systems	UCLA	Winter 2013
Human/Computer Interaction	UCLA	Winter 2013