EDUCATION

2011 - 2017 **PhD** Mathematics

College of Letters and Science

University of California, Santa Barbara

Dissertation: On the Numerics, Generation, and Scaling of Fluvial Landscapes

Advisor: Björn Birnir

2011 - 2015 MA Applied Mathematics

College of Letters and Science

University of California, Santa Barbara

2007 - 2011 **BS** Mathematics

BS Computer Science College of Creative Studies

University of California, Santa Barbara

ACADEMIC EXPERIENCE

2014 - 2017 Teaching Assistant

University of California, Santa Barbara

Courses Assisted:

- Differential and Integral Calculus

- Calculus for the Social and Life Sciences

Summer 2016 **Teaching Associate** (Instructor of Record)

University of California, Santa Barbara Calculus for the Social and Life Sciences II

Spring 2014 Course Grader

University of California, Santa Barbara

Graded weekly assignments on combinatorics.

2013 - 2014 **Reviewer**

International Journal of Nonlinear Sciences and Numerical Simulation

2009 - 2010 Course Reader

University of California, Santa Barbara

Wrote framework code (C++) for introductory computer science course; including skeleton code and unit-testing functions.

NONACADEMIC EXPERIENCE

2012 - 2017 Instructional Design Assistant

Collaborate Faculty Resource Center University of California, Santa Barbara

Provides specialized consultation and support for faculty on the University's Online Learning Management System, including answering questions via email, oneon-one drop-in assistance, and the creation of online documentation.

2010 - 2012 Operations Coordinator

Collaborate Student Support Center

University of California, Santa Barbara

Oversaw daily operation of the Student Help Desk: managed consultants, answered phone and email questions primarily about the University email system, managed the loaning and returning of software, troubleshot technical problems, and enforced lab policies.

Reliability Coordinator: Responsible for keeping employee policies updated, ensuring employees were following all policies, and initiating proper disciplinary procedures when needed.

2009 - 2010 Student Consultant

Collaborate Student Support Center University of California, Santa Barbara

Cleaned labs daily, answered guests' computer related questions, troubleshot technical problems, and enforced lab policies.

PUBLICATIONS

In Review Numerical Analysis of Fluvial Landscapes

OUTREACH ACTIVITIES

2016 - 2017 Chapter President

Society for Industrial and Applied Mathematics (SIAM) Student Chapter

University of California, Santa Barbara

2013 - 2017 **Member**

Society for Industrial and Applied Mathematics (SIAM) Student Chapter

University of California, Santa Barbara

PRESENTATIONS

June 2017 Fluvial Landscapes: The Next Generation

Ph.D. Defense

University of California, Santa Barbara

May 2017 Recursive Frogs

Society for Industrial and Applied Mathematics (SIAM) Seminar

University of California, Santa Barbara

October 2016 Fractal Interpolation

Society for Industrial and Applied Mathematics (SIAM) Seminar

University of California, Santa Barbara

April 2016 Fractals, Interpolation, and Variograms; Oh My!

Society for Industrial and Applied Mathematics (SIAM) Seminar

University of California, Santa Barbara

September 2015 Simulations of Fluvial Landscapes

Advancement Talk

University of California, Santa Barbara

December 2013 Simulations of Fluvial Landscapes

American Geophysical Union (AGU) Fall Meeting

San Francisco, CA

COMPUTER SKILLS

Familiar with Matlab, Python, C++, Java, HTML, CSS, PHP, JavaScript, and LATEX.