Education University of California, Davis Sep  $2012 \rightarrow Present$ 

M.S. in Physics — December 2013

Ph.D. in Physics — June 2017, expected

University of Miami B.S. in Physics, Applied Mathematics. Cum Laude Aug  $2008 \rightarrow \text{May } 2012$ 

Research

Department of Physics, University of California, Davis

June 2013  $\rightarrow$  Present Researcher

Currently working with Professor John Rundle, developing the Virtual California earthquake simulator. We are building python modules for analyzing and visualizing simulation data, as well as developing a web-based interface to the simulation data and analysis tools.

Department of Astronomy, California Institute of Technology

Summer Undergraduate Research Fellow

June  $2011 \rightarrow \text{Aug } 2011$ 

Updated and expanded the data analysis pipeline for the Planck collaboration (CMB telescope), and helped identify parameter correlations using the D.O.E.'s supercomputing center NERSC.

Department of Physics, University of Miami

Research Assistant

Aug  $2009 \rightarrow \text{May } 2012$ 

Reconstructed the optical properties of a Cosmic Microwave Background telescope (WMAP) from its measured radiation maps. Presented poster at January 2011 meeting of the American Astronomical Society.

Published Research

Kasey Schultz, M. K. Sachs, E. M. Heien, J. B. Rundle, D. L. Turcotte, and A. Donnellan. Simulating gravity changes in topologically realistic driven earthquake fault systems: First results. Pure and Applied Geophysics, doi: 10.1007/s00024-014-0926-4, in press (2014)

Schultz, K.W., Huffenberger, K.M. Stacking catalogue sources in WMAP data. Monthly Notices of the Royal Astronomical Society, Volume 424, Issue 4, pp. 3028-3036 (2012)

Teaching

Department of Physics, University of California, Davis

& **Tutoring**  Teaching Assistant

Sep  $2012 \rightarrow \text{June } 2013$ 

Led discussion lab of over 30 students covering introductory physics.

Department of Biology, Barry University, Miami Shores, FL

 $Jan 2012 \rightarrow May 2012$ 

Tutored MBRS-RISE students in calculus and calculus-based physics.

Department of Physics, University of Miami

Physics Lab tutor Oct  $2011 \rightarrow \text{May } 2012$ 

Helped students with most of undergraduate physics.

Department of Mathematics, University of Miami

Math Lab tutor Sep  $2009 \rightarrow \text{May } 2010$ 

Helped students with calculus, differential equations, linear algebra.

Member, Omicron Delta Kappa

Sep  $2011 \rightarrow \text{present}$ 

Honors & Awards

One of the highest collegiate honors, along with Phi Kappa Phi and Phi Beta Kappa.

Isaac Bashevis Singer Scholarship

Aug  $2008 \rightarrow \text{May } 2012$ Full academic scholarship to the University of Miami, 30 annually.

Foote Fellow Aug  $2008 \rightarrow \text{May } 2012$ 

Highest academic honor at U. of Miami, gives student freedom to design own curriculum, 50 annually.

NSF CSMS Scholarship Aug  $2010 \rightarrow \text{May } 2011$ 

NSF Computer Science and Mathematics for Scientists, 5 annually at Univ. of Miami.

Beyond the Book Scholarship May  $2010 \rightarrow \text{Aug } 2010$ 

Supported summer research, University of Miami College of Arts and Sciences, 12 annually.

National Ocean Scholarship Aug  $2008 \rightarrow \text{May } 2010$ 

4 annually, awarded by the Consortium for Ocean Leadership and the National Ocean Sciences Bowl.