

Education	University of California, Davis M.S. in Physics — Dec 2013 Ph.D in Physics — 2016, expected	2012 → Present
	University of Miami , Coral Gables, FL B.S. in Physics, Applied Mathematics. <i>Cum Laude</i>	2008 → 2012
Research	Department of Physics, University of California, Davis <i>Graduate Student Researcher</i> Advisor: Prof. John Rundle	June 2013 → Present
	<ul style="list-style-type: none"> • Developing the Virtual Quake simulator, analyzing large data sets • Developing computational infrastructure for generating catalogs of observable seismic surface patterns as well as earthquake and tsunami scenario catalogs • Compiling computational tools for simulation data analysis and visualization into Python modules 	
	Department of Astronomy, California Institute of Technology , Pasadena, CA <i>Summer Undergraduate Research Fellow</i> Advisor: Dr. Brendan Crill, NASA JPL	Summer 2011
	<ul style="list-style-type: none"> • Updated and expanded the data analysis pipeline for the Planck collaboration • Identified correlations between detector model parameters using the D.O.E.'s supercomputing center NERSC 	
Published Research	Department of Physics, University of Miami <i>Research Assistant</i> Advisor: Prof. Kevin Huffenberger	2009 → 2012
	<ul style="list-style-type: none"> • Reconstructed the optical properties of a Cosmic Microwave Background telescope (WMAP) from its measured radiation maps • Identified a selection bias in the WMAP point source catalog 	
	K. W. Schultz , M. K. Sachs, E. M. Heien, M. R. Yoder, J. B. Rundle, D. L. Turcotte, and A. Donnellan, <i>Virtual Quake: Statistics, Co-Seismic Deformations and Gravity Changes for Driven Earthquake Fault Systems</i> , International Association of Geodesy Symposia, in press (2015)	
	M. R. Yoder, K. W. Schultz , E. M. Heien, J. B. Rundle, D. L. Turcotte, J. W. Parker and A. Donnellan. <i>The Virtual Quake earthquake simulator: A simulation based forecast of the El Mayor-Cucapah region and evidence of earthquake predictability</i> , Geophysical Journal International, under review (2015)	
	M. R. Yoder, K. W. Schultz , E. M. Heien, J. B. Rundle, D. L. Turcotte, J. W. Parker and A. Donnellan. <i>Forecasting earthquakes with the Virtual Quake simulator: Regional and fault-partitioned catalogs</i> , International Association of Geodesy Symposia, under review (2015)	
	K.W. Schultz , M.K. Sachs, J.B. Rundle, D.L. Turcotte, <i>Simulating Gravity Changes in Topologically Realistic Driven Earthquake Fault Systems</i> , Pure and Applied Geophysics, doi: 10.1007/s00024-014-0926-4, in press (2014)	
Conferences & Talks	K. W. Schultz and K. M. Huffenberger, <i>Stacking catalogue sources in WMAP data</i> . Monthly Notices of the Royal Astronomical Society, Volume 424, Issue 4, pp. 3028-3036 (2012)	
	K. W. Schultz , M. K. Sachs, E. M. Heien, M.R. Yoder, J. B. Rundle, D. L. Turcotte, A. Donnellan. poster: <i>Virtual Quake: The Software Formerly Known as Virtual California</i> Seismological Society of America (SSA) Meeting 2015, Pasadena, CA. Apr 2015	

- K. W. Schultz**, M. K. Sachs, E. M. Heien, J. B. Rundle, J. Fernandez, D. L. Turcotte, A. Donnellan. **talk:** *Virtual Quake: Earthquake Statistics, Surface Deformation Patterns, Surface Gravity Changes and InSAR Interferograms for Arbitrary Fault Geometries (won an OSPA award)* American Geophysical Union (AGU) Fall Meeting 2014, San Francisco, CA. Dec 2014
- K. W. Schultz**, M. K. Sachs, E. M. Heien, J. B. Rundle, J. Fernandez, D. L. Turcotte, A. Donnellan. **poster:** *Virtual California: Earthquake Statistics, Surface Deformation Patterns, Surface Gravity Changes and InSAR Interferograms for Arbitrary Fault Geometries.* Southern California Earthquake Center (SCEC) Meeting 2014, Palm Springs, CA. Sep 2014
- K. W. Schultz**, J. B. Rundle, M. K. Sachs, K. F. Tiampo, T. J. Hayes, J. Fernandez, D. L. Turcotte, A. Donnellan. **talk:** *Monitoring Major Fault Systems from Space: Modeling Implications for Dedicated Gravity Missions.* GENAH Conference. **Matsushima, Japan.** July 2014
- Multi-Hazards Summer School:** 1 week workshop on disaster prediction, preparedness, and response hosted by IRIDeS at Tohoku University and by the Association of Pacific Rim Universities (APRU). **Sendai, Japan.** July 2014
- K. W. Schultz**, B. Crill, **talk:** *Separating Planck Bolometers and Beams via Simulated Planet Observations*, Summer Undergraduate Research (SURF) Final Presentations. California Institute of Technology, Pasadena, CA, August 2011
- K. W. Schultz**, K.M. Hufferberger, **poster:** *Stacking Catalog Sources in WMAP Data*, 217th Meeting of the American Astronomical Society. Seattle, WA, January 2011

Teaching & Tutoring	Department of Physics, University of California, Davis <i>Teaching Assistant</i>	2012 → 2013
	Department of Biology, Barry University , Miami Shores, FL <i>Physics and Math tutor</i>	2012
	Department of Physics, University of Miami <i>Physics Lab tutor</i>	2011 → 2012
Honors & Awards	UC Davis Graduate Student Travel Award	Summer 2015
	One of the highest collegiate honors along with Phi Kappa Phi and Phi Beta Kappa	
	Winner of an Outstanding Student Paper Award in Natural Hazards	December 2014
	Awarded to top 3-5% of presenters in each section at the American Geophysical Union 2014 fall meeting	
	Member, Omicron Delta Kappa	2011
	One of the highest collegiate honors along with Phi Kappa Phi and Phi Beta Kappa	
	Isaac Bashevis Singer Scholarship	2008 → 2012
	Full academic scholarship to the University of Miami (UM), 30 annually.	
	Foote Fellow	2008 → 2012
	Highest academic honor at UM, fellows freely design their curriculum, 50 annually	
Computing Skills	NSF CSMS Scholarship	2010
	NSF Computer Science and Mathematics for Scientists, 5 annually at UM	
Study Abroad	Beyond the Book Scholarship	2010
	Supported summer research, UM College of Arts and Sciences, 12 annually	
	National Ocean Scholarship	2008 → 2010
	Awarded by the Consortium for Ocean Leadership, 4 in the U.S. annually	
	Languages: Proficient in Python, R, C++, L ^A T _E X, Bash. Experience with SWIG, SQL, HTML, Java Modules & Libraries: Proficient with Git, Matplotlib, Numpy, Scipy	
Study Abroad	Summer 2009: ACC Summer Study Abroad in China and Vietnam. Studied environmental science, policy, and toxicology at:	
	• South China Agricultural University , Guangzhou, China.	
	• Yunnan University , Kunming, China.	
	• Hanoi University of Mining and Geology , Hanoi, Vietnam.	