

Mitchell Smith

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2928 Willow Oak Dr
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Education

- * **University of Tennessee - Knoxville:** Energy Science and Engineering Graduate Fellow (8.2012 -)
- * **Ursinus College:** B.S., Major in Physics, Minor in Mathematics (5.2012)
- * **West Chester East High School:** Graduated (6.2008)

Research Experience

- * **University of Tennessee: Knoxville** (2013-present): Building and testing hardware based grid emulator under the CURENT Hardware Test Bed. Support for data visualization and communication groups as well
- * **Ursinus College** (2011,2012): Advanced electronics: self taught, research course led by Prof. C. Cellucci.
- * **Ursinus College** (2011): Discrete morse theory fundamental research and exploratory research into the theorems of discrete morse theory
- * **Ursinus College** (2010, 2011): Magneto-optical trap laser alignment, stabilization, and characterization (5-8.2010); stable Rydberg atom trap establishment (1-5.2011) with Prof T. Carroll
- * **Ursinus College** (2009): Development of three-electrode portable electro-cardiogram unit; sent to US Army bases for testing traumatic brain injury in soldiers (8-12.2009). Work with Prof. C. Cellucci.

Awards and Honors

- * **CURENT Internal Perfect Pitch Contest 1st place winner** (2014)
- * Ursinus College **Wayne F. Millward Prize for Excellence in Theater** (2012)
- * Ursinus College **Summer Fellows Research Program** (2010, 2011)
- * Ursinus College **Academic Scholarship** (2008-2012)

Employment History

- *Oak Ridge National Lab **Graduate Research Assistant** (7.2014-present): Work in DECC micro-grid lab. Upgrade of DSPACE lab components to NI CompactRIO
- * Longwood Gardens **Performing Arts Technician** (6.2011-present): General audio and lighting set-up and maintenance. Working knowledge of a large range of equipment
- * Ursinus College **Center for Academic Support** (8-12.2010): General/Intermediate Physics Tutor
- * Ursinus College **Event Technician** (8.2009-5.2012): Maintenance/repair of lighting equipment and electronic systems of the Kaleidoscope Performing Arts Center. Repair/upgrade of A/V systems across campus

Presentations and Publications

- *AKCE **International Journal of Graphs and Combinatorics** (2014): Graph Isomorphisms in discrete Morse Theory
- * Ursinus College **Summer Fellows Research Presentation** (7.2011): Discrete Morse Functions and their Properties
- * Ursinus College **Physics Summer Research Summary** (7.2010): The Alignment, Stabilization, and Characterization of a Rubidium Magneto-Optical Trap

Interests

- * **CURENT:** Student Leadership Council Internal Vice President (2013-present)
- * **Breakaway Student Productions:** Technical Coordinator (2011-2012)
- * **Phi Kappa Sigma, Delta Rho Chapter:** Alumni Relations Officer(2010-2011), Community Service (>20 hours per semester)
- * **Electronics Hobbyist:** Circuit design/troubleshooting, project development (2004-present)
- * **Travel:** Sweden and Japan (International Summer Villages), Russia, Mexico, France, Caribbean

Skills

Windows, LaTeX, Mac, Linux, Java, MatLab, LabView, Soldering, French (reading)