

Jeremy M. McLaughlin

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Education

Master of Science in Education May 2010
Concentration in Instructional Design and Technology Radford, VA
Radford University
College of Education & Human Development

Bachelor of Science in Physics December 2007
Minor in Astronomy Radford, VA
Radford University
College of Science & Technology

Work History

**Eastern Region Sales Manager
and Applications Engineer** February 2008 - Present
Nippon Pulse America, Inc. Radford, VA

- Provide engineering and technical support by way of email, telephone, and on-site visits to regional sales representatives, distributors, and customers in 27 states.
- Developed and maintain a comprehensive technical training program to be used with new employees, sales representatives, and distributors.
- Created and maintain working demos of our motors and electronics for use at trade shows and customer facilities.

Adjunct Professor of Physics Spring 2010
New River Community College Dublin, VA

- Created and delivered lectures for an introductory collegiate Physics course.
- Created a website for online delivery and archive of lab and lecture material.

Configuration Management Specialist 1 May 2007 - August 2007
SRA International, Inc. Alexandria, VA
United States Patent and Trademark Office contract

- Aided in the completion of Physical Configuration Audits of USPTO automated systems.
- Supported the development of the Systems Development Life Cycle for the Office of the Chief Information Officer.

Peer Instructor
Radford University
Department of Chemistry and Physics

Fall 2004 - May 2007
Radford, VA

- Served as student instructor for both of the Introductory Astronomy Courses taught at the University.
- Helped tailor lesson plans and labs to better suit the students' needs.

Resident Assistant
Radford University Department of Residential Life

August 2004 - December 2005
Radford, VA

Engineering Aide
Galaxy Scientific Corporation (acquired by SRA International)

June 2003 - December 2004
Crystal City, VA

- Researched Quality Assurance topics for use in white papers, and aided in data entry of Quality Assurance metrics and rectifying data redundancies.
- Assisted with the testing and implementation of Rational's Requisite Pro onto a test server at the United States Patent and Trademark Office (USPTO). Co-authored an installation manual for the IBM Rational Suite for use at USPTO.

Research Experience

Arctic Geophysics
Radford University
Department of Chemistry and Physics

January 2008 - Present
Radford, VA

- Conducted surveys, using a Capacitively Coupled Resistivity Array and Ground Penetrating Radar, to better understand the small-scale structure and fractal dimensionality of Arctic sea ice.
- Created and maintained physicsonice.org where secondary and post-secondary students documented their research experience and communicated with family, friends, and fellow students while working on the North Slope of Alaska.
- Directed secondary and post-secondary physics students in proper research and field survey techniques.

Selu Nature Conservancy
Radford University
Department of Chemistry and Physics

Spring 2006 - Present

- Continued study of the long term photometric variability of Post-Asymptotic Giant Branch Stars.
- Developed new outreach programs to engage the community's interest in Astronomy.
- Lecturer for Society of Physics Students K-12 Science Days.

Southeastern Association for Research in Astronomy
East Tennessee State University
Department of Astronomy and Physics

Summer 2005
Johnson City, TN

- Studied the long term photometric variability of Post-Asymptotic Giant Branch Stars.
- Developed and implemented a faster, more accurate photometric analysis routine.

Presentations and Publications

A Ground Penetrating Radar Study of the Arctic Sea Ice Near Barrow Alaska
Presented at the Fall 2010 meeting of the American Geophysical Union.
San Francisco, CA, December 2010.

Physics On Ice: From the Cryosphere to the Blogosphere
Masters Thesis and Oral Defense. Presented for the Radford University Department of Education
Radford, VA, April 24th, 2010.

Georeferenced Ground Penetrating Radar Studies of Arctic Sea Ice
Presented for the Physics Special Session of the 18th Annual Undergraduate/Graduate Student Engagement Forum.
Radford University, Radford, VA, April 15th, 2010.

Ground Penetrating Radar and GPS Surveys of Arctic Sea Ice
Presented for the Barrow Arctic Research Center.
Barrow Arctic Science Center, Barrow, AK, March 13th, 2010.

Electrical Resistivity and GPR Studies of the Sea Ice Near Barrow, Alaska
Presented for the Cryospheric Sciences Branch at the NASA Goddard Space Flight Center.
Greenbelt, MD, March 10th, 2009.

The Fractal Structure of the Ice/Water Boundary of Sea Ice Near Barrow, Alaska
Presented at the Fall 2008 meeting of the American Geophysical Union.
San Francisco, CA, December 17th, 2008.

The Use of Ground Penetrating Radar in Understanding the Structure of Sea Ice
Presented for the Physics Special Session of the 16th Annual Undergraduate/Graduate Student Engagement Forum.
Radford University, Radford, VA, April 14th, 2008.

Photometry of Post-AGB Stars
I.A.P.P.P Communications No. 101, page 27-31. September 2005.

Computer Experience

Languages: HTML, L^AT_EX, Fortran, Python, PHP, MySQL

Operating Systems: MacOS X, Windows 95/98/NT/2000/XP/7, Ubuntu Linux

Applications: Maple, Matlab, MaxIM DL, IDL, Adobe Creative Suite

Memberships and Activities

American Geophysical Union

American Association of Variable Star Observers

National Weather Service SKYWARN weather spotter

ΦMA Sinfonia Fraternity, ΞΘ chapter

Awards and Honors

President Radford University Physics and Astronomy Club (2006-07)

Radford University Society of Physics Students, Vice-President (2006-07), Secretary/
Treasurer, (2005-06)

National Society of Collegiate Scholars

Featured Student, Radford University Recruiting Campaign

References

Rhett Herman Ph.D.

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