email: mjstyczi@uw.edu

# CURRICULUM VITAE

of

Marshall John Styczinski

### **PERSONAL**

Information: US Citizen, born August 1988 in Dublin, California.

Position: Graduate student at University of Washington.

Interests: Space physics and astrobiology research; science communication and public outreach

Website: http://students.washington.edu/mjstyczi/

#### **EDUCATION**

09/2012 – present University of Washington In progress: Doctor of Philosophy

Field: Physics

Complete: Graduate Certificate

Field: Astrobiology
Degree conferred: Master of Science

Field: Physics

09/2006 - 06/2010 University of California, Davis

Degree conferred: Bachelor of Science with Highest Honors

Field: Physics

Significant works: "On the Return of HP West: The Revival and Restoration of a Hewlett-Packard

5950A Photoelectron Spectrometer" (Undergraduate Honors Thesis, May 2010)

# **AFFILIATIONS**

Science Communication Fellow, Pacific Science Center Board of Directors, "Engage" science communication program University of Washington Astrobiology American Association of Physics Teachers American Physical Society

## PROFESSIONAL QUALIFICATIONS

Extensive experience with UNIX/bash, IATEX, Fortran, C++, Excel, and LabVIEW Substantial experience with Python, Adobe Illustrator, Javascript, ROOT, C, HTML, and FileMaker 5 years formal experience teaching university physics, including TA training and exam writing Laboratory Safety Training, UW Environmental Health and Safety Department

## RESEARCH POSITIONS

08/2012 – present Graduate Student, University of Washington Research focus: Magnetic sounding of Jupiter's moons

Magnetospheric plasma modeling

Advisor: Research Associate Professor Erika Harnett

01/2014 - 03/2017 Graduate Student, University of Washington

Past research: Improving the efficiency of conceptual instruction in- and out-of-class

Student understanding of Gauss's law Interdisciplinary learning in science courses

Advisor: Professor Paula R. L. Heron and Peter S. Shaffer

04/2011 - 07/2012 Junior Specialist, University of California, Davis

Duties: Design, build, test, and analyze cryogenic bubble detection experiment (Tripathi);

Develop and implement software for analyzing irradiated magnets,

assess radiation damage of magnets used in Linear Collider R&D (Pellett);

Supervisor(s): Professor S. Mani Tripathi, Professor Emeritus David Pellett

07/2010 - 04/2011 Development Technician, University of California, Davis

Duties: Restore, repair, and improve indium evaporative deposition system (Tripathi);

Construct sensitive Double Chooz neutrino detector in international team (Svoboda);

Train and mentor undergraduate laboratory assistants with X-ray photoemission spectrometer (Fadley)

Supervisor(s): Professor S. Mani Tripathi, Professor Robert Svoboda, Distinguished Professor

Charles S. Fadley

05/2008 - 06/2010 Undergraduate Research Assistant, University of California, Davis

Duties: Restore and optimize X-ray photoemission spectrometer system, analyze Si/Mo

multilayer crystal native oxide properties

Supervisor(s): Distinguished Professor Charles S. Fadley

### TEACHING EXPERIENCE

09/2012 - present Graduate Teaching Assistant, University of Washington

Courses: Introductory physics tutorials and laboratories, advanced electromagnetism tutorials

Structure: Sole or co-instructor leading discussions in 24–32 student classrooms

Note: Most terms as head TA, leading training sessions for other TAs, writing exams,

and course administration (including curriculum writing and revisions)

09/2012 - present Physics Study Center Staff, University of Washington

Courses: Introductory and advanced physics

Structure: Individual homework and conceptual guidance

10/2007 - 06/2012 Physics Club Volunteer Tutor, University of California, Davis

Courses: Introductory physics and calculus

Structure: Individual homework and conceptual guidance

09/2004 - 06/2006 Peer Tutor, Portola Jr.-Sr. High School

Courses: Introductory physics, 7–8<sup>th</sup>-grade science and math Structure: Individual homework and conceptual guidance