email: mjstyczi@uw.edu

### CURRICULUM VITAE

of

Marshall John Styczinski

### **PERSONAL**

**Information:** US Citizen, born August 1988 in Dublin, California. **Position:** Doctoral Candidate 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, Physics
Complete: Graduate Certificate, Astrobiology

Degree conferred: Master of Science, Physics

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

Degree conferred: Bachelor of Science with Highest Honors, 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)

#### HONORS AND AWARDS

NASA Earth and Space Science Fellowship

JPL Space Grant Summer Internship, sponsored by Washington NASA Space Grant Consortium Science Communication Fellow, Pacific Science Center

Bachelor of Science with Highest Honors from UC Davis

## **AFFILIATIONS**

Board of Directors, "Engage" science communication program University of Washington Astrobiology

#### PROFESSIONAL QUALIFICATIONS

Extensive experience with UNIX/bash, IATEX, Fortran, C++, Excel, and LabVIEW Moderate experience with Python, Adobe Illustrator, Javascript, ROOT, C, HTML, and Matlab 6 years formal experience teaching university physics, including TA training and exam writing

# RESEARCH POSITIONS

08/2012 - present Doctoral Candidate, 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 - 06/2018 Graduate Teaching Assistant, University of Washington

Courses: Introductory physics tutorials and laboratories, advanced electromagnetism tutorials,

and introductory courses in astrobiology, planetary science, and space science

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