Meredith Durbin

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Employment

Space Telescope Science Institute June 2014 - Present
Research & Instrument Analyst I

- Duties include: manipulation and interpretation of data (i.e. images, spectra, detector/sensor readouts) to characterize HST instruments; providing support for scientists using HST data
- Member of WFC3 calibration team

Education

May 2014 **Pomona College**
B.A. in Physics
G.P.A. 3.6/4.0

August 2010 **Santa Rosa Junior College**
A.S. in Natural Sciences
Highest Honors

Skills

Programming	Python (Matplotlib, NumPy, SciPy, AstroPy), Java, HTML/CSS, jQuery
Software	IRAF/PyRAF, Mathematica, SolidWorks, LaTeX, Linux/UNIX, Adobe CreativeSuite (Dreamweaver, Photoshop, Illustrator, InDesign), Microsoft Office, Mac OS X

Research Experience

Carnegie Observatories June 2013 - April 2014

- Developed pipeline to perform photometry, aperture correction, and calibrations on crowding-limited IRAC channels 1 & 2 data
- Produced new light curves & period-luminosity relations for RR Lyrae variables in ω Centauri
- Investigated evidence for a metallicity term in the period-luminosity relation

Pomona College Department of Physics & Astronomy May - August 2012

- Operated 1-meter telescope at Table Mountain Observatory to obtain polarimetry data on quiescent blazars & polarized standard stars
- Analyzed data in IRAF & Python to characterize polarimeter & determine blazar polarization

Teaching Assistantships

Pomona College Department of Physics & Astronomy Jan 2013 - May 2014

- Assisted introductory physics and astronomy students with homework sets and laboratory work, including telescope operation and imaging, software use, experimental setup, troubleshooting, and data analysis

Scripps College & W. M. Keck Joint Sciences May - July 2013

- Tutored post-baccalaureate premedical students in introductory physics, including Newtonian mechanics, electricity & magnetism, thermodynamics, and topics in modern physics