DANIEL WYSOCKI

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EDUCATION

State University of New York at Oswego

B.S. Physics & Computer Science, Astronomy Minor

2015

AWARDS

Outstanding Astronomy Minor Award, SUNY Oswego

2015

Sigma Xi / ORSP Quest 2015 Award, SUNY Oswego

2015

RESEARCH EXPERIENCE

Department of Physics & Astrophysics, University of Delhi, India

Summer 2014

Advisors: Dr. Sukanta Deb, Dr. Shashi M. Kanbur, and Dr. H. P. Singh

Topic: Morphology of the Large and Small Magellanic Clouds using fundamental mode Cepheids

Grant: IUSSTF travel grant

Physics Department, SUNY Oswego, NY, USA

August 2013 - June 2014

Advisor: Dr. Shashi M. Kanbur

Topic: Principal Component Analysis of Cepheid variable stars

Graduate Institute of Astronomy, National Central University, Taiwan

Summer 2012

Advisors: Dr. Chow-Choong Ngeow and Dr. Shashi M. Kanbur Topic: Template fitting of first-overtone Cepheid variable stars

Grant: NSF IIA award 1065093

WORK EXPERIENCE

NASA's Jet Propulsion Laboratory

June 2015 – August 2015

Pasadena, CA

Worked on validating thermal models for the Cassini Solstice Mission.

Office of Learning Services, SUNY Oswego

Software Computing Systems Graduate Student I

2012 - 2015

Tutor

Oswego, NY

Tutoring lower division physics, math, computer science, and astronomy courses at SUNY Oswego.

Dr. Scott Roby, Planetarium Director, SUNY Oswego

June 2013 – July 2013

Development Assistant

Oswego, NY

SOFTWARE PROJECTS

https://github.com/dwysocki/

plotypus

https://github.com/astroswego/plotypus

A Python library and command line utility for manipulating and plotting stellar lightcurves.

mini-java

https://github.com/dwysocki/mini-java

A compiler for a non-trivial subset of Java, written in Clojure.

Hidden Markov Music

https://dwysocki.github.io/csc466/semester-paper/

A machine learning application for algorithmic music composition and analysis.

SELECTED TALKS

Quest 2015, Oswego, NY

April 15, 2015

Title: "Hidden Markov Music"

Author: D. Wysocki

Title: "The LMC/SMC Structure from Cepheid Variables" Authors: D. Wysocki, S. M. Kanbur, S. Deb, H. P. Singh Title: "Optimal Modeling of Variable Star Light Curves" Authors: D. Wysocki, E. Bellinger, S. M. Kanbur

SUNY Undergraduate Research Conference Brockport, NY

April 10, 2015

Title: "Morphology of the Large Magellanic Cloud Using Classical Cepheids"

Authors: D. Wysocki, S. M. Kanbur, S. Deb, H. P. Singh

SUNY Oswego Computer Science Association, Oswego, NY

February 12, 2015

Title: "Introduction to Git and GitHub"

Author: D. Wysocki

Video: https://youtu.be/irZF1VYDHJA

RAS Annual Fall Scientific Paper Session, Brockport, NY

November 15, 2014

Title: "Morphology of the Large and Small Magellanic Clouds Using Fundamental Mode Cepheids"

Authors: D. Wysocki, S. Deb, S. M. Kanbur, H. P. Singh

Joint Meeting of NYSSAPS and ASNY, Oswego, NY

April 26, 2014

Title: "Principal Component Analysis of Cepheid Variable Stars"

Authors: D. Wysocki, Z. Schrecengost, E. Bellinger, S. M. Kanbur, D. Sukanta, H. P. Singh

Quest 2013, Oswego, NY

April 17, 2013

Title: "Template Fitting of First Overtone Cepheid Variable Stars"

Authors: D. Wysocki, S. M. Kanbur, C. Ngeow

POSTER PRESENTATIONS

https://dwysocki.github.io/posters/

Summer Scholars Symposium, Oswego, NY

September 5, 2014

Title: "Morphology of the Large and Small Magellanic Clouds"

Authors: D. Wysocki, S. Deb, S. M. Kanbur, H. P. Singh

American Astronomical Society meeting, Boston, MA

June 3, 2014

Title: "Principal Component Analysis of Cepheid Variable Stars"

Authors: D. Wysocki, Z. Schrecengost, E. Bellinger, S. M. Kanbur, D. Sukanta, H. P. Singh

Summer Scholars Symposium, Oswego, NY

September, 2012

Title: "Light Curve Template for First-Overtone Cepheid Variable Stars"

Authors: D. Wysocki, C. Ngeow, S. M. Kanbur

TECHNICAL SKILLS

Python, Clojure, Common Lisp, Java, Bash, C, R, IDL, LATEX, markdown Languages

Tools Linux, Git, Emacs, Jekyll

CLUBS AND ORGANIZATIONS

Sigma Xi, Associate Member

2014 - present

American Physical Society, Member

2011 - present

Association for Computing Machinery, Member

2015 - present

SUNY Oswego Astronomy Club, President

2013 - 2015