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# **WORK EXPERIENCE**

#### **Research Assistant at Grinnell College**

Oct. 2010 – present

- Objective: characterize frequency changes in variable stars to investigate mode switching.
- Operate a 24" Cassagrain reflecting telescope to gather and process photometric data, spectra and images.
- Write, test and edit programs in PV-Wave, Pascal, and IDL to support data processing.
- Organize data, update and create uniform logs.

## **Physics Mentor at Grinnell College**

Jan. 2012 – present

- Develop and host two study sessions weekly and assist professor with in-class problem sets.
- Courses tutored: Modern Physics, Intro to Physics 1 & 2, Mechanics

## Research Assistant at the *Complutense University* in Madrid, Spain

**Jan. – April 2013** 

Reduced spectra data using COSMOS to assist in identifying the chemical composition of HI regions.

#### Research Assistant at Northern Arizona University

**Summer 2013** 

- Objective: identified debris disks around M stars and characterized their inner radii and fractional luminosities.
- Located and processed target data from the IRSA (WISE, Spitzer) and ViseR (UCAC4) databases.
- Wrote, tested and edited programs in IDL to analyze photometric data.
- Wrote a paper and gave a talk to the NAU staff detailing the background, data, methodology and results of my work.
- Will present a poster at the 2014 winter American Astronomical Society (AAS) conference.

## Research Assistant at the National Radio Astronomy Observatory

Summer 2012

- Objective: characterized the star formation rate and stellar mass of extended ultraviolet disks to determine relevance to future growth of the host galaxy.
- Write computer code in IDL to analyze image-based data.
- Wrote a paper and gave a talk to the NRAO staff detailing the background, data, methodology and results of my work.
- Working on first author paper for publication.
- Presented a poster at the 2013 winter AAS conference.

## **Research Assistant at Grinnell College**

**Summer 2011** 

- Objective: completed a Fourier analysis program to characterize the frequency changes in variable stars.
- Gathered photometric data, spectra and images. Wrote edited programs. Logged activity.

## Multi-lingual Floor Interpreter at the Adler Planetarium in Chicago, IL Mar. 2010 - Aug. 2010

- Facilitated live shows and conducted tours in English and Spanish.
- Engaged young children and their families in age-appropriate educational experiences.

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## **EDUCATION**

## Grinnell College, Grinnell, IA

**Graduation Spring 2014** 

- Expected Bachelor of Arts
- Major: PhysicsGPA: 3.865

## IES Abroad Madrid, Madrid, Spain

**Spring 2013** 

• Semester intensive language study abroad program.

#### **ACTIVITIES**

#### **Social Entrepreneurs of Grinnell**

# **Aug. 2011 – present** *Aug. 2013- May 2014*

## **Co-Managing Director**

• Supervise project managers of all SEG committees

- Train new project managers
- Present activities of SEG to the Board of Directors
- Manage communications between SEG and other organizations.

## **Entrepreneurial Loans Project Manager**

Fall 2012

- Prepare business for the Entrepreneurial Loans committee
- Conduct committee meetings
- Manage positions within the committee
- Communicate with loan applicants/recipients
- Update SEG Co-Managing director on activities of the committee.

## Physics SEPC Aug. 2012-present

- Student Educational Policy Committee
- Plans social events for physics majors
- Assists with faculty reviews and new faculty hires

#### **Grinnell Astronomy Club**

Aug. 2010-present

Aug. 2010-present

#### **Grinnell Singers**

## Alto Section Leader

- Conduct alto rehearsals
- Prepare music for rehearsals

#### **Drake Library Tutor**

Aug. 2011 – Jan. 2012

#### **Grinnell Women in Science**

Aug. 2010 - Aug. 2011