

Education

University of Oregon, Master of Science in Chemistry
Emphasis in Semiconductors and Photovoltaics

Expected June 2018

University of Puget Sound, Bachelor of Science in Chemistry
Computer Science Minor
GPA: 3.89/4.00

May 2016

Technical Experience

Computational Modeling

March 2015 – May 2016

Dr. Steven Neshyba, University of Puget Sound, Tacoma, WA, USA

- Demonstrated self-reliance and time-management by conducting a summer research project to simulate faceted growth of an ice crystal surface in Python and presenting a poster at the University of Puget Sound summer research symposium while PI was out of the country
- Modified prewritten code for a faceted ice crystal growth simulation to improve program efficiency and stability, and implemented additional code to incorporate new variables according to physical models and GROMACS Molecular Dynamics Simulations
- Collected, organized, and interpreted data by executing simulations to find that faceted ice growth is a direct result of the properties of terraces at facet corners due to surface supersaturation and quasi-liquid thickness
- Trained fellow research students in the use of Python, GROMACS, and Github by teaching through examples and acting as a reference
- Neshyba, S.; **Adams, J.**; Reed, K.; Rowe, P. M.; Gladich, I. "A quasi-liquid mediated continuum model of faceted ice dynamics." *Journal of Geophysical Research – Atmospheres*. December 10, 2016. DOI: 10.1002/2016JD025458

Liquid Crystal Research

January 2015 – May 2015

Dr. Eric Scharrer, University of Puget Sound, Tacoma, WA, USA

- Created dozens of mixtures of Liquid Crystals (LC) and examined phase changes through optical microscopes and Differential Scanning Calorimetry (DSC) to build graphs showing how mixing two LC compounds affects transition temperatures
- Analyzed data from DSC to find percent mixtures of LC with the largest eutectic dips to make them more viable for room temperature use
- Successfully completed project goals for LC research by completing research within time constraints and finding which LC mixtures displayed eutectic behavior

Skills

Programming Languages:

Intermediate: Python including NumPy package, Java

Beginner: Haskell, Prolog, JavaScript, HTML, MIPS

Foreign Languages: Japanese (intermediate)

Work Experience

Delivery Driver for 2 Go Services

November 2016 – May 2017

- Planned a time sensitive delivery schedule to pick up food from several restaurants and deliver to multiple locations during appointed lunch and dinner hours
- Delivered, set up, and presented food for groups ranging from 10-100 individuals while verifying that orders were complete and no items were missing from the restaurant
- Worked 60 hours per week under a self-employment status to ensure the company met all scheduled deliveries to help build the reputation of the company

Technology Service Assistant at University of Puget Sound

August 2012 – May 2016

- Assisted faculty, staff, and students with troubleshooting software issues including Wi-Fi connectivity, viruses, and data recovery through multiple forms of communication such as phone, email, and in person
- Wrote instruction and information sheets for personal computers and university software for use within technology services and for the general public
- Managed a booking system for loaning university equipment such as cameras, laptops, voice recorders, and PA systems to successfully meet scheduled requests by avoiding and rearranging double bookings

Resident Assistant at University of Puget Sound

August 2014 – May 2015

- Developed residence hall programs and created bulletin boards to educate 30 students about diversity and inclusivity, lifestyle practices to help support academic excellence, and address student emotional and physical needs
- Acted as an impartial mediator and provided resources to student to help resolve interpersonal conflicts during high stress situations

Awards

American Chemical Society Student Affiliates Award

May 2016

- Highest GPA in the chemistry/biochemistry department of 30 students

Peter Wallerich Scholarship

April 2015

- Awarded one of three \$6000 scholarships available for Junior and Senior students attending the University of Puget Sound

- Must be nominated by a professor

Eagle Scout

November 2011