

PHILIP NELSON

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EDUCATION

Utah State University

Masters of Computer Science in Computer Science | 4.0 GPA

Logan, Utah

Jan 2019 – May 2022

Utah State University

Bachelor of Science in Computer Science and Computational Math | 3.7 GPA, Cum Laude

Logan, Utah

Jun 2012 – May 2019

WORK EXPERIENCE

Space Dynamics Laboratory

Software Engineer

Logan, Utah

Aug 2019 – Present

- Developed CI/CD pipelines to build, scan, and deploy applications in 5+ languages
- Implemented a data fusion algorithm in C++, based on a python prototype, to produce real-time results from live data feeds
- Created a web based front end for a geospatial, data processing application with VueJs and CesiumJs
- Maintained and extended capabilities of satellite data processing pipeline and viewer in C++ with ZeroMQ and Qt

Space Dynamics Laboratory

Assistant Software Engineer

Logan, Utah

Sep 2018 – Aug 2019

- Maintained a legacy application written in C++ and wxWidgets
- Implemented new features to support business needs and new abstractions around legacy code to increase developer productivity

Utah State University

Computer Science Tutor

Logan, Utah

Jan 2017 – Aug 2019

- Read and debugged code written by students seeking help while enabling them to identify and fix bugs on their own
- Taught computer science concepts and principles to other students

United States Air Force

Premiere College Internship Program (PCIP) Intern

Hill AFB, Ogden, Utah

May 2018 – Aug 2018

- Worked with a group of six software engineers, in C#, to develop the GPS Common Component of the Joint Mission Planning System

Utah NASA Space Grant Consortium

Fellow

Logan, Utah

Jun 2017 – Aug 2017

- Developed software to aid in high altitude balloon launches which was used to calculate required balloon lift at launch
- Implemented an open source SPA architecture for cubesat flight software (Cubium)
- Demonstrated Cubium's inter-process, UDP socket communication at the Small Sat Conference in Logan, Utah

LEADERSHIP & SERVICE

AmeriCorps

VISTA Summer Associate

Logan, Utah

May 2017 – Aug 2017

- Provided free summer camps for Hispanic youth in STEM fields and coordinated with local schools to provide free lunch to campers
- Coordinated two six-week camps serving 23 local youth

Community Service Organization

Volunteer

Rio Grande do Sul, Brazil

May 2014 – Apr 2016

- Supervised up to 10 volunteers, helped them establish goals, and tracked results
- Developed strong communication skills while presenting programs to the public that promoted behavioral and life style changes
- Offered community service and participated in charity work including distributing aid materials after natural disasters

LICENSES & CERTIFICATIONS

Security+ | Issued by CompTIA

Feb 2023

Amateur Radio - Technician: KI7PAH | Issued by the FCC

Jul 2017

SKILLS, LANGUAGES, INTERESTS

- **Programming:** C++, Python, JavaScript / TypeScript, SQL / PostgreSQL, Bash Script
- **Tools:** Git, GitLab Pipelines, Linux, Docker, Vim & VS Code, LaTeX
- **Languages:** English (Native speaker), Portuguese (Proficient)

HONORS & AWARDS

President's Volunteer Service Award: Silver

Logan, Utah

Issued by The President of the United States

Aug 2017

- Awarded for 400 hours of community service