Drew M. Johnson

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Technical Skills

- ❖ Languages: C, C++, Java, Perl, Python, Assembly (various), JavaScript, Rust
- ❖ Skills: Embedded Systems, Device Drivers, Software Engineering, Version Control, Continuous Integration, Code Optimization, Unit Testing, Software and Hardware Debugging, Agile and Waterfall Methodologies, GIS
- ❖ Tools: Eclipse, Visual Studio, GitHub, Jenkins, Linux, Windows, OpenStreetMap

Work Experience

Software Development Engineer, BlackSky Technology, Seattle, WA　　　　June 2022 – Present
> Developing and maintaining software systems as a member of the Ground & Control Systems team in support of our constellation of Earth-imaging satellites.

Software Engineer, Spectralux Avionics, Redmond, WA　　　　June 2015 – June 2022
> Primarily focused on DO-178C embedded systems development of avionics products based on the STM32 microcontroller platform. This included software requirements development as well as C, C++, and assembly language programming. Collaborated on the design of the avionics product's fault management system and was the primary implementer. Additionally, managed the engineering department's configuration management repositories and requirements databases. Side-projects included: an automated field data-logging platform, a Linux-based embedded system customer prototype, and a user interface simulation and design tool built with Java. Served as company representative at industry committee meetings concerning data link communication standards (RTCA SC-214 & EUROCAE WG-92).

Supervising Technician, PLU Instructional Technologies, Tacoma, WA　　May 2013 – May 2015
Student Technician　　　　　　　　　　　　　　　　　　　　　September 2012 – May 2013
> Was responsible for providing media support for events and productions in the areas of audio recording, sound reinforcement, duplication, television production, delivery and set up of audio, television and media equipment both on and off campus, as well as supervising and training student technicians.

Open Source Volunteer Work

OpenStreetMap　　　　　　　　　　　　　　　　　　　　　　　October 2019 – Present
> Contributing data, source code, and artwork as well as participating in community discussions and project governance as an Associate Member of the OpenStreetMap Foundation.

Education

Pacific Lutheran University, Tacoma, WA   May 2015
    Bachelor of Science in Computer Engineering and Computer Science
    Minor in Mathematics

    Dean's List   Fall 2011 – Spring 2013
    ACM Intercollegiate Programming Contest Team   2013-2014
    COMAP Mathematics Modeling Competition   2015

    Relevant Coursework:
        Data Structures, Programming Languages, Algorithms, Software Engineering, Assembly Language, Computer Architecture, Computer Networks, Discrete Structures, Digital Systems, Linear Algebra, Electrical Circuits, Microelectronics

    Projects:
        Arduino-based Drum Kit Sequencer   Spring 2012
            Physically interfacing MIDI sequencer with visual feedback and tempo control
        Class Registration Assistant
                                                    Fall 2012
            Scrapes class-information from PLU websites and gathers it for easy viewing and analysis, written using Groovy
        Multistage Audio Amplifier   Fall 2013
            Op-amp based audio amplifier designed to drive low-impedance speakers
        "Linear AlgeBot"   Fall 2013
            Autonomous rover that uses GPS coordinates and linear algebra to navigate a circle
        Inventory Management Android App   Spring 2014
            Team-based software engineering project designed to handle the inventory of a clothing co-op
        EEG-Responsive AI-Controlled Rover   Fall 2014 – Spring 2015
            Senior Capstone project, thorough design and documentation, proof of concept implementation