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Trevor Garrood

EDUCATION

University of Washington - Seattle September 2018 – June 2022

B.S. Electrical Engineering

- GPA: 3.64 (Major: **3.75**)
- Dean's List 2018-2021, President of UW Men's Ice Hockey, President of Chi Psi Fraternity, Vincent Kerkof Scholar
- **Relevant Coursework**: Data Structures and Algorithms, Digital Circuits and Systems, Sensing & Controls Systems, Data Programming, Web Programming, Distributed Systems, Technical Communication

WORK EXPERIENCE

Software Engineer Intern | Amazon.com June 2021– September 2021

- Implemented an automated, event-driven AWS tool to re-drive failed API requests capable of handling 20,000+ calls an hour in 12 different AWS regions
- Optimized a file generation process using Python and Bash scripts to reduce on-call developer workload by 20%
- Built and managed a REST API endpoint to reduce errors displaying expiration dates by 15%
- Tools: Amazon Web Services – Simple Queue Service, Lambda, API Gateway, CloudFormation, CloudWatch, Python, Java, TypeScript

Teaching Assistant | Paul G. Allen School of Computer Science November 2020 – March 2021

- Prepared and presented a weekly lesson on Python and data science principles for a class of over 30 students, achieving an average student feedback rating of 4.9/5.0
- Coordinated with team members to design web-based unit tests that accurately assess student's understanding
- Tools: Python – pandas, matplotlib, seaborn, sci-kit, pytorch

Student Engineer | Society for Advanced Rocket Propulsion September 2019 – March 2021

- Designed, prototyped, manufactured, and tested a high-voltage plasma actuator integrated in the nose cone of a bi-propellant rocket for the purpose of aerodynamic control
- Programmed control measures to ensure safety at the launch pad via precise activation (failure rate below 0.01%)
- Tools: C/C++, Linux, Arduino

SKILLS

Languages (Proficient): Java, Python, TypeScript, Verilog

Languages (Familiar): HTML, CSS, SQL, C, C++, Assembly

Libraries/Frameworks: React, Node.js

Tools: Git, Bash, Linux, Vim, Mockito

Leadership: President of UW Ice Hockey and Chi Psi Fraternity

PROJECTS

Machine Learning Model to Predict NHL Playoffs

- Engineered a machine learning algorithm to predict NHL playoff wins with ~80% accuracy using raw web scraped data and a decision tree classifier
- Constructed multiple test programs to assert accurate output, and used Seaborn/Matplotlib to present design decisions and results
- Tools: Python – pandas, matplotlib, seaborn, sci-kit, pytorch

Interactive Bluetooth LED Coffee Table

- Programmed an Arduino to display a variety of playable two-dimensional video games on a 12 x 12 matrix of LEDs under a custom-built table's surface with Android Bluetooth connectivity
- Integrated infrared, touch, and distance sensors into the table to increase interactivity and accessibility
- Tools: C++, Arduino, Rhino, SolidWorks, Soldering

Yipper Web App

- Utilized Node.js to create a full-stack social media app that allows users to post, like, and search messages with user data stored in SQL database
- Developed website structure and style with HTML and Tailwind CSS with JavaScript for user interactivity