Charlie Hanacek

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Education

Washington State University, Pullman, WA – Expected Graduation 2020
B.S. Computer Science
Accumulative GPA: 3.06
Bainbridge High School, Bainbridge Island, WA – Graduated 2016
Accumulative GPA: 3.31

Technology Summary

Languages/Frameworks/Version Control: C, C++, SFML, SDL, Python, Numpy, Docker, Bash, Make, Ruby, Ruby on Rails, MySQL, SQLite, PostgreSQL, Python, JavaScript, Node.js, Vue.js, Swift, Alamofire, ELK Stack, Zabbix, Git, Github, Gitlab
OSes: Ubuntu/Debian, Mac OS X, Windows 10

Desktop Aquarium Simulator (Project)

lug-fishtank is a desktop aquarium simulator that also acts as a video doorbell for the Linux Users' Group office that I created to make the office more interesting and accessible.

- Engineered a multithreaded system to handle smooth animation of hundreds of sprites and synchronous, streaming video on extremely limited hardware (Raspberry Pi)
- Developed a genetic and food chain system so that fish slowly evolve, and new kinds of fish populate the tank over time.
- Utilized peer-to-peer networking so that fish can swim between connected instances running on different machines, like an extended desktop.

Technologies Used: C++14, Raspberry Pi, SFML2 Graphics, Breep, OpenCV, Murmur/Mumble

Work Experience

Information Security Group Student SysAdmin at WSU EECS IT (August 2018 – Present)

- Built a systems monitoring and data dashboard system using an array of Raspberry Pis in multiple locations
- Re-implemented and improved a Raspberry Pi-powered ActiveDirectory password reset station for helpdesk staff

Assistant Management Systems Analyst at Seattle City Light (June 2018 – August 2018)

- Documented as-is workflows for various business procedures in anticipation of an implemented RPA solution
- Worked with multiple business groups to document and gather requirements
- Designed, organized, and co-hosted a workshop to collect user complaints

Web Developer for Associated Students of WSU (May 2017 – April 2018)

- Built a web app quiz that matches new students with clubs on campus based on their interests, similar to a Buzzfeed quiz.
- Created a bulk download and upload feature so that club and quiz attributes could be edited in a CSV
- Engineered a custom matching system to pair students with clubs that fit their interests
- Wrote documentation and unit tests for future developers to extend and update the application

Teaching Assistant for Program Design and Development in C (January 2017 – January 2018)

- Taught a three-hour lab once a week, guiding students as they learned.
- Graded all submitted assignments, quizzes, and exams
- Provided thoughtful, timely, and constructive feedback on all submitted work and assisted students with concepts and assignments during office hours

Leadership Experience

President of the WSU Linux Users Group (May 2018 – Present)

- Planned, organized, and executed a 24-hour social gaming event called WSUCon in an extremely tight timeframe.
- Supported wired and wireless networking for 200+ PC gamers at WSUCon 2018.

Bainbridge Community Broadcasting High School Liaison (September 2012 – December 2015)

- Implemented access control and security system to protect and monitor studio facilities.
- Worked with Bainbridge Island School District administration to get a radio production studio on the local high school campus.
- Built and managed the station's music licensing and reporting system to comply with multiple reporting formats.