Joshua Wentzel

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Objective: To solve complex problems in a challenging position.

Summary: I enjoy going above and beyond what is required to ensure reliability down the road.

Education

Oregon State University | Graduating: June 2021 **Corvallis, OR**

Electrical & Computer Engineering | *Computer Science Minor* | *Math Minor* | GPA: 3.65

- Relevant Coursework: Computer Org & Assembly Language, Transmission Lines, Signals and Systems I & II, Data Structures, Web Design, Digital Logic Design, Electrical Fundamentals, Discrete Mathematics, Linear Algebra, Differential Equations, Vector Calculus, Physics EM, Probability, Computer Networks.

Skills & Interests

- Languages/technologies: Experienced with Unix/Linux, Python, C, C++, C#, Unity Engine, Godot, Lua, Git, Java, HTML, JavaScript, CSS, JTAG, Boundary scan, iOS, Android Studio, MATLAB, Google Analytics. Previously used Swift, Objective-C, Blender, Unreal Engine, Rust, Go, TensorFlow.

Projects

Music Box | https://github.com/explojoe/musicbox *January 2020*

Signal Processing Project |Python

- Detects dominant frequencies over time to convert audio to a piano tone locked version.
- Uses harmonic sum spectrum, Gaussian windowing, median filtering, parabolic peak estimation.

Work Experience

Lattice Semiconductor **Hillsboro, OR**

Manufacturing Engineering Intern *June 2020 – September 2020*

- Utilized JTAG boundary scan to test interconnectivity between FPGAs.
- Wrote a program to automate the design of serial test vectors for use in automated testers.

Lexmark / CompuCom **Albany, OR**

Printer Installation Technician *June 20th, 2019*

- Safely loaded and transported printers inside a Target distribution center around industrial machinery.
- Identified and implemented methods to more efficiently transport supplies by reducing trips.
- Streamlined the documentation process to ensure tasks were completed in a timely manner

yoR Labs, LLC. **Portland, OR**

UX Systems Design Intern *Fall 2016 – Fall 2017*

- Used Android Studio to develop user interface for tablet-based ultrasound reading and annotation software.
- Interface used Wi-Fi Direct to connect multiple tablets for larger displays and to connect with heads up display. Used Android Debug Bridge (ADB) to target and optimize resource intensive processes.

Sticky.tv **Portland, OR**

Web and Hardware Intern *Spring 2016 – Fall 2016*

- Created web-based transit and rideshare display that predicted arrival times for rideshare vehicles, TriMet buses, MAX trains, and Streetcar. Optimized client for Raspberry Pi.
- Used web requests to take GPS coordinates of nearby Car2Go vehicles and find ETA to nearest vehicle.
- Designed all circuitry and software for an interactive display designed to sell ASICS shoes. Customer planned to order 11 more.
- Created animated web-based display for analytical data from emoji app (Two-Stick: Timbers Messenger) designed by the Sticky.tv company. Webserver hosted using MAMP and written in Python.
- Wirelessly connected several Raspberry Pi's with speakers and used Python to create interactive sound art piece.

Other Interests

- Organizations: Treasurer of Pi Chapter of Eta Kappa Nu (IEEE), a national honor society for electrical and computer engineering students. Founded and managed Grant High School Programming Club.