JAMES HEILINGER

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WEB DEVELOPER

I am a talented individual, focused on innovation and ready to apply my skills in HTML, CSS and JavaScript as a Front-End / UX Developer.

- 6+ years experience working in software engineering and computer programming.
- Comfortable working on a team of developers following the Agile process in a fast-paced environment.
- Enjoy applying my problem solving skills to user interface design in the context of web technologies.
- Written 4 websites using responsive web design and accessible web development principles. websites from the ground up, creating the visual design, responsive design as well as optimizing them for faster page loading and search engine optimization and submitting them to Google Search Console.
- Interested in learning about industry trends and emerging technologies.
- Experience in writing JavaScript, HTML and CSS; familiar with CSS frameworks like MaterializeCSS, tailwindCSS and Bootstrap.
- Proven track record to learn required technical skills to perform my job duties.

EXPERIENCE

Intel Corporation, Hillsboro, OR — April 2012 – November 2020

Software Development Engineer, April 2014 – November 2020

Responsible for writing and maintaining conformance test automation scripts, Jenkins CI/CD infrastructure and pipelines, and creating tests for the team's products.

- Wrote clear and concise software documentation instructing readers how to write programs that leveraged the special features of the Python interpreter embedded in our debugging tool. Working example code was provided along with explanations.
- Identified pain points in maintaining the team's Jenkins infrastructure and initiated fixing them by converting to Pipeline jobs, reducing the number of jobs by about 75%.
- Leveraged features of our Qt-based graphical user interface framework to put in place a process allowing the team to automatically generate tests for our software using a Python script that I wrote.
- Designed a graphical tool using pure JavaScript in the back-end and HTML and CSS for the user interface to assist the developers in creating the object names required for the automatic test generator, saving valuable developer time.
- Created a flexible and extendable Python based hardware simulator to test the team's graphical hardware debug tool.
- Wrote Python scripts used for electrical conformance testing, interfacing with multiple pieces of test equipment, the hardware under test and data processing software. Python best practices and coding standards were followed.

Network Hardware Engineer, April 2012 – April 2014

Responsible for debugging customer issues related to 1G Ethernet server cards, testing LAN magnetics, and developing conformance test automation scripts.

- Trained across geographic barriers to facilitate conformance test station setup with our counterpart lab in Asia. Also spent time teaching the lab technician how the conformance tests worked to help her debug common issues that would arise.

- Used email and conference calls to collaborate with an Intel group in California in order to test the SFP+ electrical conformance of the switch platform they were designing.
- Demonstrated strong organizational skills and the ability to prioritize tasks in a leadership role testing 1G LAN magnetics modules. This required me to draft a clear test plan, define passing module specifications, write documentation detailing how to test the magnetics modules, communicate with several departments, and influence vendors to test larger quantities for us.

Portland General Electric Company, Portland, OR June 2011 – February 2012

Undergraduate intern

Responsible for performing transmission system study work for generation interconnection requests and transmission planning projects.

- Performed study work on the Portland, Oregon, and surrounding area transmission system for generation interconnection requests.
- Created a generic PowerWorld model for wind farms following the WECC generic wind farm modeling guidelines.
- The company valued my contributions and extended the 6-month internship another 3 months part-time while I completed my degree.

Intel Corporation, Hillsboro, OR April 2010 – March 2011

Undergraduate intern

Responsible for assisting with LAN magnetics module testing, test procedure updates and post-processing test data.

- Tested LAN magnetics transformer modules to collaborate with vendors and improve performance.
- Created a script to post-process data for vendor meetings.
- Learned to operate 2-, 4-, and 16-port VNAs, Time Domain Reflectometers (TDR), and LCR meters.
- The group was impressed with my work and extended the 6-month full-time internship another 6 months part-time while I took classes full-time.

EDUCATION

Portland State University, Portland, OR

Bachelor of Science (B.S.), Electrical Engineering, cum laude. Power Systems emphasis.

ACCOMPLISHMENTS AND GROWTH

- Competed in a company sponsored secure code challenge event where I learned the basics of fixing security vulnerabilities for web applications. Vulnerabilities included SQL injection attacks, reflected cross-site scripting, bad authentication schemes, insecure data storage and many more. I placed 17th out of 215 participants.
- Completed several tutorials in my spare time to gain experience in full-stack web development. including front-end design with React and Angular and back-end Restful API design with Express, MongoDB, and Node.js. I have also learned about SQL databases and queries.
- Designed a wireless home security alarm using Arduino, building a custom software package for it.