

JAMES HEILINGER

www.linkedin.com/in/james-heilinger

SOFTWARE DEVELOPER

Driven individual seeking a remote position as a software developer. Skilled as a computer programmer and passionate about finding and eliminating process bottlenecks and inefficiencies through software automation.

- 6+ years experience working in software engineering and development.
- Knowledgeable in the Agile process and using JIRA for story tracking. Equally familiar with Trello.
- Range of experience from Python and UI development to DevOps and software testing.
- Experienced in developer tools such as the command line, Git, Gerrit, Pylint, VSCode and Pycharm; familiar with the GitHub pull request model.
- Excellent written and verbal communication skills; fluent in English.
- Proven track record learning required technical skills to perform job duties.

EXPERIENCE

div & def, Port Orchard, WA

November 2020 – Present

Programming and Web Development

Customer oriented role in designing, coding, launching and maintaining websites as well as providing Python programming services.

- Designed easy to use marketing websites for clients, focused on converting website visitors. Websites were coded in HTML, TailwindCSS and AlpineJS and launched on Netlify.
- Wrote high-quality, object oriented Python code for a client's Raspberry Pi Pico based game device. Created the hardware design and a wiring diagram. Maintained excellent communication, updating the client with progress reports and working with the client to solidify device requirements.
- Managed a client's Wordpress website theme update in order to restore critical functionality. Performed pre-update backups and coordinated the update effort with staff to ensure a smooth transition. Tested the new website theme to ensure it met the client's standards.

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.

- Created a video tutorial teaching viewers how to write programs that leveraged the special features of the Python interpreter embedded in our debugging tool. I was responsible for all of the content in the tutorial; formulating the lesson plan, writing the script, recording screencasts and providing voice-over for the video.
- 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 GUI 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, HTML and CSS 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.
- Leadership role in testing 1G LAN magnetics modules. This required me to draft a clear test plan, 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.
- Gained 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.
- Designed a wireless home security alarm using Arduino, building a custom software package for it.