

HERMAN WONG

+1(408) 202-3252 ◇ San Jose, CA

hwong.0305@gmail.com ◇ <https://www.linkedin.com/in/hw335>

EXPERIENCE

Software Developer

Jul 2024 - Present

IBM

San Jose, CA

- Collaborate with product manager and designers to implement project, asset and roles separation by groups for 4+ high-impact customers.
- Rewrite and optimize the ETL pipeline web application from Angular to React for scalable frontend integration with backend services.
- Contribute to backend integration and testing efforts using Node.js and PostgreSQL.
- Automate the configuration of the local development environment with scripting and containerization (Docker), cutting the build time by 20%.

Frontend Engineer

Jul 2021 - Jun 2024

Streamsets (Acquired by IBM)

San Francisco, CA

- Implement secure auth workflows using AWS Cognito and Firebase, enabling scalable identity management adhering to customer requirements
- Design and build frontend components for access control UI, improving customer configuration experience.
- Develop reusable notification system to streamline in-app messaging across the platform.
- Diagnose and resolve edge-case bugs in account linking logic for users switching between different OAuth and email authentication.
- Design and develop frontend UX to allow users to share resources with a "service account" to satisfy critical customer use case

Manufacturing Engineer

Mar 2014 - Jun 2021

Onto Innovations (formerly Nanometrics)

Milpitas, CA

- Update test scripts for motion control stage to reduce the number of invalid failures by 30%.
- Partner with Manufacturing, Quality, and R&D teams to enhance wafer-handling robots, enabling reliable support for customer bowed wafers
- Develop tools / fixtures for the improvement of the manufacturing process to reduce cycle time by 15%.
- Experience with fabricated machined, sheet metal and welded parts.
- Experience with Solidworks, PDM, FEA Static and Modal Analysis.
- Release new Front-End Module for new products by collaborating with Supply Chain, R&D Engineering and Contract Manufacturers
- Manage the transition of Company Logos for all Products shipping out of Milpitas.
- Manages New Product Introduction by ensuring designs are manufacturable, work center routing, work instructions and test fixtures
- Manages process workflow and labor hours for in house process from subassemblies to final test
- Oversee calibration and maintenance of production equipment
- Refine Product Configuration process by maintaining configurable BOM Structure and Sales Configurator
- Architect company-wide Configuration Process flow used between three different business units with highly configurable products
- Collaborate with Quality, R&D Engineering and Manufacturing to resolve manufacturing and quality issues.
- Act as a point of contact for the Engineering Change Process. Review all Engineering Change Orders (ECOs) and resolve associated problems. Work with Manufacturing, Planning and Supply Chain on implementation of changes.

Engineering Intern

Guided-Wave Inc

Nov 2011 - Dec 2013

Rancho Cordova, CA

- Designed mechanical assembly tooling for assembly floor personnel.
- Assisted in resolving assembly floor issues by performing minor machining on non-conforming materials.
- Assisted in completing Engineering Change Orders (ECOs).
- Created new 3D model in Autodesk Inventor from existing Mechanical Desktop drawings and updated drawings to current format.
- Created facility layout drawing using AutoCAD
- Increased assembly efficiency by implementing smart hardware part number system on the production floor.
- Supported new product release by creating drawings and assembly instructions for new product.

PROJECTS

Job Search Application Built a full-stack LLM-powered resume tailoring tool using HonoJS and SambaNova API, leveraging prompt engineering and semantic analysis to extract key terms from job descriptions.

c0d3 Open Source Online Software Development Education Platform built on React, Node.JS, GraphQL and PostgreSQL. ([Try it here](#))

myProxy Developed infrastructure automation tool that provisions domain + SSL certs across four production servers. Uses Node.js and Bash scripting, and interfaces with hosting registry and Let's Encrypt.

EDUCATION

B.S. Mechanical Engineering, California State University, Sacramento

2013

Certificate in Scientific Computation

SKILLS

Web Dev	React, Angular, Javascript, TypeScript, PostgreSQL, MySQL, HTML5, CSS3, Vite, GraphQL, RJSX, ExpressJS, Svelte, NodeJS
Data Analysis	Python, Pandas, MatLab, Mathematica
General	Git, MS Word, MS Excel, MS PowerPoint, MS Project, MS Visio, G-Suite (Google)
Other	Solidworks, Autodesk Inventor