Jenny Ouk

Contact

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Skills

Strong: JavaScript (ES6+), TypeScript, React, Node.js, Express, Material-UI, SQL (PostgreSQL), HTML, CSS Experienced: Redux, Zustand, MongoDB, GraphQL, Apollo Server and Client, Jest, Supertest, React Testing Library, CSS Animations, Twilio, Webpack, Vite, Docker, AWS (EC2, S3, ECR), CI/CD (Github Actions)

Experience

SQLens (Open Source) | Software Engineer | Dec 2023 - Present

- Designed, built, and tested an interactive ER diagram tool for PostgreSQL databases that visualizes foreign key relationships and allows users to make changes to their database schema structure
- Designed front-end components with React and React Flow to create dynamic and interactive data flow visualizations; used React hooks to efficiently render changes to the user's database as changes to the DOM
- Used Zustand to manage application state and reduce prop drilling by creating centralized store for data
- Utilized GraphQL and Apollo Server to deliver well-formatted, strongly-typed data to the front end
- Programmed in TypeScript for both front end and back end to catch type-related errors early in the development process and to create a more robust codebase for future open source collaborators
- Developed informational website using Next.js and utilizing Tailwind CSS to create a responsive layout that works for both mobile and desktop users; launched site with Vercel to take advantage of its automated CI/CD pipeline through Github actions

Logitech | Senior Mechanical Engineer | Jan 2021 - Jan 2023

- Collaborated with team of designers, engineers, and product managers on Logitech Sight, a tabletop conference room camera that provides immersive audio and video experiences for remote call-in participants; spearheaded the mechanical integration of video, audio, thermal, and processing components **Juul Labs** | Senior Mechanical Engineer | Nov 2018 Sep 2020
- Ran and customized test automation scripts in python to measure performance of prototype Juul pods, shepherding data-driven prototype development of next-generation of consumable pods for optimal ultra-high volume production and resistance to leakage

Cisco Meraki | Product Design Mechanical Engineer/Manager | Nov 2013 - Nov 2018

- Managed and grew team of engineers from two generalists to seven specialists; hired and trained new team members, molding their roles to best fit experience, personal goals and business need
- Granted multiple patents for award-winning enclosures using PTC Creo for high-end B2B IT and security devices, owning industrial design, thermal design, detailed mechanical design, sourcing, and manufacturing **Netgear** | Product Design Mechanical Engineer | Jun 2012 Nov 2013
- Developed mechanical enclosures and thermal systems for wireless products, incl. R7000 and Arlo camera **Neidhardt, Inc** | Product Design Engineer | Mar 2011 Jun 2012
- Created complex mechanical assemblies for custom indoor and outdoor architectural lighting installations

Projects

Invektus | Software Engineer | Diabetes health monitor and logging tool

- Created a non-relational database (MongoDB) for quick retrieval of user health logs
- Engineered back-end using Node.js/Express and applied middleware design pattern to modularize back-end requests for better code readability and debugging
- Implemented robust testing suite with Jest, React Testing Library, and Supertest for unit, component, and end-to-end testing to ensure consistent user experience

Education

Stanford University | Stanford, CA

- MS Mechanical Engineering | 2011 | GPA 3.8
- BS Engineering, Product Design | 2009 | GPA 3.6

Recognition

U.S. Patent 9762709-B1 and 10+ design patents; Red Dot 2020, 2017, 2015; iF 2020; IDEA Silver 2020

Hobbies

- Pottery wheel and sculpture, painting, seaweed foraging, making (and eating) fresh pasta
- 3D and 2D design work with Creo, Solidworks, OnShape, Figma, Adobe Illustrator and InDesign