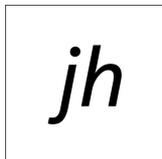


joel hawkins



📍 Portland, OR
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📁 [portfolio | joel.fm](#)
🔗 [in linkedin @hwknsj](#)
🐙 [github @hwknsj](#)

SKILLS & INTERESTS

Computer Skills

Fluent | JavaScript/TypeScript ES6+, React.js (Hooks), Redux, Next.js, Gatsby.js, Node.js, GraphQL, Apollo Client/Server, Jest, Enzyme, HTML5/CSS3, SASS/SCSS, Python, SQL, Git, jQuery, PHP, WordPress, Apache, Unix/Shell, Tableau, Adobe CC, MS Excel.

Skilled | D3.js, three.js, WebGL, Webpack, AWS (DynamoDB, S3, Lambda).

Learning | Vue.js, Angular, React Native, AWS Cert., WebRTC.

Awards & Certifications

IKM React.js Assessment | 80th percentile

TripleByte JS Assessment | 'Exceptional'

Apple Certified Repair Technician

Spoken Languages

English (native), Spanish (conversational).

Interests & Hobbies

Music composition/production, classically-trained vocalist, fashion/apparel, hip-hop dance, distance running.

I'm a web developer specializing in JavaScript, front & back. With 5+ experience, a background in physics, data analysis/visualization, & 4 years of professional JS web development, I've cultivated a diverse skill set. Working in diverse agile teams of designers, artists, engineers, executives, and with my own clients, I prioritize delivering efficient, optimized apps. utilizing the latest tech/best practices. I'm currently focused on advanced SSR (Server-Side-Rendered) applications, GraphQL implementations, and Apollo Client/Server & Next.js.

My skills may be described as 'full stack'—though I find this term minimizes the importance of aesthetic design & user experience. By continuously expanding my knowledge of front & back-end development I have the unique ability to create intuitive, cohesive applications that take full advantage of the interactive nature of the web—always elegant, efficient, & engaging. Formally educated in physics, mathematics, computation, music composition, and digital art, my multi-disciplinary approach to problem-solving delivers creative solutions to complexity.

I graduated from Reed College (B.A. Physics, 2015) and authored thesis over the entirety of my senior year. I sought to quantify subjective visual characteristics (e.g. 'naturalness') of time-variant patterns formed by computed nonlinear chemical reactions first discovered by Alan Turing ('reaction-diffusion'). Utilizing new & increasingly complex mathematical methods known as 'homology', I performed multi-dimensional computational analysis of resulting patterns topology (Python/C). Communicating mathematically complex research in a clear & engaging way presented a challenge. I looked to the web as an interactive canvas—I built a webpage to present the computer generated graphics alongside interactive JS data visualizations. The satisfying reward of seeing those with no formal math/physics education (i.e. mom) gain an intuitive understanding of my work ultimately led me to pursue a career in the web. The accessibility of my work has inspired continuing research on this topic by successive Reed students. The full text & interactive visualization are available at info.joel.fm/thesis.

Visit my design portfolio at joel.fm for more including, personal projects, work examples, and links to my social sites.

KEY EXPERIENCE

eBay, Inc.

April–Sept. 2020
Portland, OR (remote)

Front-End Developer II

Regional Development: Americas

Developed critical components for eBay public-facing JavaScript pattern libraries, [eBay Skin \(React\)](#) & [eBay-UI Core](#).

Ensured cross-platform/category compatibility of components developed for site-wide libraries.

Audited & enhanced security of source code, identifying out-dated / potentially exploitable Node.js dependencies.

Refactored numerous components according to latest ES6/7 React/JavaScript standards, minimizing codebase & increasing efficiency.

Implemented proper type-checking in TypeScript-based libraries.

Contributed to novel eBay library [Marko.js](#).

Wrote comprehensive React component tests using Jest, Enzyme to ensure stability & uniformity.

Authored interactive documentation of work using Storybook to increase adoption & increase understanding.

Reviewed & provided critical feedback on numerous GitHub pull-requests.

Tripwire, Inc.

July 2019–Feb. 2020
Portland, OR

UI Developer

R&D / SaaS UI | Contract: 7 months

Designed & developed streamlined user interfaces for R&D web applications in JavaScript & TypeScript with React.js, Redux, Node.js, and more.

Developed UI for new feature enabling "on-demand" vulnerability scanning of large-scale systems/networks with specific rulesets, targets, extending flexibility & functionality of Tripwire IP360.

Lead project to upgrade & unify front-end UI among Tripwire Enterprise products creating consistent UX & company branding.

Identified & documented vulnerabilities in Tripwire & partner software ensuring security in public releases.

Provided platform for *POC* research/exploration leading to discovery of critical security vulnerabilities & previously undocumented exploits of Unix-based systems.

Created interactive forms for Tripwire SaaS/cloud-based enterprise products enabling fine-tuned system management for DevOps and administrative users with Material UI, TypeScript, React hooks, Formik, ultimately reducing computational/network load and eliminating dependency on costly Redux-based operations.

Implemented automated UI tests for Tripwire SaaS application using Cypress & developed code linting/formatting hooks for R&D.

Overhauled administrative web-UI for in-house "state scheduler" platform for R&D purposes.

Squishymedia

Oct. 2018–Feb. 2019
Portland, OR

JavaScript Developer

Front-end Development

Headed development of proprietary web annotation application for Columbia University dept. of philosophy. Developed Google Chrome extension enabling 'on-the-fly' annotation of the web & community features (e.g. commenting, rating annotations, profile pages).

Designed, developed, deployed annotator playground site incl. user registration/authentication.

Ensured real-time display of newly created annotations by all users incl. source website in Chrome extension UI.

Authored API specifications for annotator back-end & integrated into extension and user site.

Determined technology stack for annotator app: Chrome Extension, React.js, Gatsby.js, Node.js.

Developed & styled new company website using Gatsby with GraphQL enabling easy content creation/editing.

Composed multiple interactive design comps for new company website in Adobe XD.

Coded homepage loading animation (Velocity.js) invoking desired theme.

Worked closely with other developers in agile process to deliver under intense deadlines.

Nike, Inc.

Feb. 2016–Mar. 2017
WHQ, Beaverton, OR

Resident Physicist & FlyKnit Innovation Engineer

Advanced Manufacturing | Contract: 1 year, 2 months

Innovated advanced product creation processes of Nike FlyKnit footwear tech. via continuous software infrastructure updates to maximize efficiency.

Optimized dispatching of unique work orders to factory floor; designed automated Node.js API connected to AWS S3/Lambda/DynamoDB to deliver unique machine-specific production files/info generated 'on-the-fly' to operators on factory floor, eliminating all manual labor.

Developed cross-platform Manufacturing Execution System & REST API (Node.js, PSQL) maintaining realtime work-order database. Extensively tested to ensure non-blocking efficiency & stability at massive scale.

Authored extensive documentation of MES to allow further development; the codebase executes manufacturing of Nike's new FlyKnit Apparel product line.

Identified inefficient stages in FlyKnit production processes, delivering unique merchandise to consumers in unprecedented delivery time while minimizing waste.

Collaborated with manufacturing, design, and software teams to mitigate design concepts with engineering challenges for new products.

Performed exhaustive manufacturing tests with data analysis, reporting on factors affecting efficiency & impact of other variables.

Developed & demonstrated weekly agile/iterative enhancements to user experience and internal workflows, benefiting Nike designers, engineers, and project managers.

Extended advanced features for the PPM tool *Workfront* with custom Node.js API & web form to optimize submission & management of new product test orders.

Developed graphical React.js web app displaying real-time work order status, continuously updating and notifying progression at each stage.

Configured & deployed numerous Node.js + Express or Apache web servers on Linux/Windows/Mac.

Collaborated in agile software development, gathering requirements, presenting weekly sprints.

EDUCATION

Reed College

Portland, OR

Bachelor of Arts in Physics

Class of 2015 | Advisor: Daniel Borrero

Thesis: *Looking at Pictures: Topological analysis of complex reaction-diffusion systems* (online at info.joel.fm/thesis)