

# joél hawkins torres

📍 Portland, OR  
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## SKILLS & INTERESTS

### Computer Skills

**Fluent** | JavaScript & TypeScript ES6+, React.js, Node.js (API architecture), Redux, Next.js, Gatsby.js, AWS deployment (S3, DynamoDB, Lambda) / Terraform / Cloudfront, GraphQL, Apollo, Jest/Enzyme, Python, HTML/CSS/SCSS, SQL, DB architecture, Nginx/Apache, Unix/Shell, Tableau, WordPress, Adobe CC, MS Excel.

**Skilled** | D3.js, three.js, WebGL, PHP

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

### Awards & Certifications

IKM React.js Assessment | 95th 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 application developer, designer, & engineer: I specialize in technologies that power the modern internet—front & back. In over 6 years of experience in professional web design/development, combined with a background in physics, data analysis & visualization, innovative product manufacturing, and professional consultation in my own business, I’ve cultivated a diverse set of skills—not limited to technical prowess. Years of collaborating with diverse teams of designers, artists, engineers, executives, as well as my own clients, reinforces my belief & motivation in working with people—interpersonal / communication skills are not incompatible with technical & scientific know-how; rather, these attributes work hand-in-hand. I prioritize delivering efficient, optimized, accessible applications, utilizing well-informed concepts of current trends & ‘best’ practices. My work is dedicated to making the web available to everyone: beautiful, easy, intuitive, and, above all, inclusive. My foremost personal project utilizes advanced SSR (Server-Side-Rendering) technologies in tandem with client-side caching (Apollo Client/Server), dramatically reducing network throughput & page-load time (the primary factor in bounce-rate).

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](http://info.joel.fm/thesis).

Visit my design portfolio at [joel.fm](http://joel.fm) for more including, personal projects, work examples, and links to my social sites.

## KEY EXPERIENCE

### Nike, Inc.

March 2021–current

Portland, OR

### Senior Application Engineer

Global Enterprise Architecture

- Design, develop, & maintain globally utilized Nike design system enabling enterprise-wide consistency in user-experience & branding.
- Lead development of front-end application—demonstrated company-wide by Senior Vice President of Global Architecture—enabling authenticated creation / deployment of dedicated AWS servers for secure, arbitrary purposes (by merely providing link to Docker / AWS image, e.g. Nginx, MySQL) including ability to report analytics via Splunk or other services.
- Initiated enterprise Web Accessibility audits & implemented accessibility testing, development tools & evangelized accessibility awareness, enabling more than 20% of users to access & use *previously inaccessible & unusable content / applications*, supporting the Nike maxim “Everybody is an athlete.”
- Configured automated CI/CD / deployment of large-scale, global web platforms to AWS S3 / Cloudfront servers on Nike domain, including end-to-end testing, creation of SSL/TLSv1.2 certificates & DNS entry (AWS Route53 DNS), using Terraform, Github Actions, & CircleCI, eliminating need for manual deployment.
- Implemented end-to-end application testing: unit tests (Jest, React Testing Library), UI testing (Jest Dom, Enzyme, Testcafe), linting / formatting, & vulnerability detection processes greatly increasing reliability & predictability of web-applications for end-users & reducing liability / risk of sensitive data exposure or exploitation by more than 40% compared to previous assessments.
- Developed & implemented tools to routinely audit, report impact, & fix vulnerabilities in enterprise platforms which routinely handle highly-sensitive enterprise, legal, & executive data, thereby significantly mitigating risk & dramatically increasing application security — ultimately leading to 60% fewer security incidents in the following quarter.
- Encouraged adoption / migration to modern web technologies (e.g. Next.js, Emotion, Gatsby.js), delivering a series of formal presentations with demonstrable improvement in both developer & user experience—a 90% improvement in page load speed & 30% overall improvement in Google Lighthouse scores.
- Enacted regular cross-team collaborative sessions, creating conversational platform for app. developers, designers, product managers, & end-users to exchange information / ideas, thereby increasing visibility, eliminating overlapping work, & streamlining process for implementing widespread, user-impactful decisions.
- Applied & implemented best development practices, automating code-linting, formatting, vulnerability detection, & deployment—ultimately enhancing code-quality, time-to-deployment, overall compatibility, & accessibility, ultimately solving for individual differences in development style while maintaining consistency across Customer Experience managed applications.
- Developed React-focused application template enabling engineers to quickly begin development of new, client requested applications & bootstrap new projects according to Nike / UX / UI design & tooling standards.
- Advocated & demonstrated use of TypeScript for Nike internal library development to improve code quality, reduce error rate, & enhance developer experience.

### eBay, Inc.

April–Sept. 2020

Portland, OR (remote)

### Senior Web Developer

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.

### Tripwire, Inc.

July 2019–Feb. 2020

Portland, OR

### Lead Full-Stack Engineer

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.
- 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.

### 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](http://info.joel.fm/thesis))