joél hawkins torres

Portland, OR
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Skills & Certification

Computer Skills

Fluent | TypeScript, JavaScript, React.js, Node.js, HTML, CSS/SASS/SCSS, CSS animations, Web Animations API, Python, Redux, Next.js, Gatsby.js, GraphQL, Apollo, AWS deployment (S3, DynamoDB, Lambda) / Terraform / Cloudfront, Jest, unit testing, WebGL, SQL, DB architecture, Nginx/Apache, Unix/shell/bash, Tableau, WordPress, Adobe CC, MS Excel.

Skilled | Kotlin, Java, D3.js, three.js, Angular, React Native, PHP.

Learning | Spring, Svelte, AWS Certification, Swift UI, Rust, Go.

Awards & Certifications

IKM React.js Assessment | 98th percentile – 2022
TripleByte JS Assessment | 'Exceptional' – 2022
Apple Hardware & Software Repair Technician – 2015

Spoken Languages

English (native), Spanish (conversational)

Interests

Music composition/production, classically-trained vocalist, hip-hop dance, running, fashion/apparel, tailoring, world politics, law.

About

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.

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Select Experience (relevant & formative)

Intuit Inc.
Senior Software Engineer III
Oct. 2022–current
Consumer Tax Group | TurboTax Online
San Diego, CA (remote)

- Delivered over 40 new features/fixes for public-facing, high-traffic TurboTax app. in React/TypeScript, improved test coverage beyond 85%, accessibility, maintaining high level of reliability.
- Lead development & implementation of customer analytics for business users achieving metrics for 100% of possible UI interactions with minimal network overhead.
- Collaborated closely with analytics team to derive meaningful metrics from business user interactions providing actionable insight & directly impacting the iterative design & implementation process.
- Expanded functionality of proprietary page templating schema 'Fuego' (JSON, Kotlin)–the underpinning of TurboTax's document structure & layout–vastly improving developer experience & capabilities.
- Engineered new features of TurboTax platform, combining Java, Kotlin, Spring Boot, JavaScript, TypeScript, & others, quickly adapting 'on-the-fly' advanced skill in Kotlin & Java with no prior exposure.
- Developed robust type definitions for core JavaScript/TypeScript & React component libraries used by hundreds of developers across all Intuit products, improving stability, test coverage, & accelerating development process ultimately delivering more stable & secure products, new features in *less time* than before.
- Mentored junior developers in advanced TypeScript & React as well as professional skills to improve collaboration with designers, managers, executives, and effectively express technical concepts to non-technical audiences.
- Promoted & expanded accessibility of TurboTax Online at the developer level, improving keyboard, screen reader, readability support as an 'Accessibility Champion'–a title awarded by Intuit's accessibility community to those with demonstrated knowledge & commitment to accessibility.
- Developed feature enabling users to instantly upload tax / financial documents & effectively unifying experience between Intuit products (e.g. CreditKarma to TurboTax).
- Collaborated with UI/UX developers to reinvent & refactor page transition, loading, & other interactive animations using JavaScript Web Animation API.

Apple Inc.
Senior Software Engineer III
March 2022–Oct. 2022
Special Projects Group
Cupertino, CA (remote)

- Lead development of location-aware Augmented Reality (AR) web application, utilizing WebGL APIs to render complex multi-dimensional geospatial data-visualizations, fetched & rendered dynamically in real-time.
- Leveraged Apple Developer APIs & numerous geospatial data sources (of various formats) & designed interactive interface displaying location-based information to enhance user's environmental awareness.
- Deployed Docker 'containerized' web applications to Apple cloud-based server infrastructure, Kubernetes clusters, & AWS.
- Configured & managed custom development server with Nginx & Node.js enabling features incl. server-side caching, SSR, dynamic content, 'lazy' loading, & server components, reducing network load while delivering highly optimized performance even for the most intensive applications.
- Contributed to Apple UI design system, enhancing React pattern library enabling visual consistency across web applications & cohesive design vocabulary company-wide.
- Proposed & demonstrated implementation of 'bleeding-edge' technologies such as Next.js / React 18, drastically reducing bandwidth usage, page-load times, & time to access critical information as well as enhance developer experience.
- Utilized latest TypeScript with detailed type-declarations in all web projects improving code quality, dramatically reducing error, while providing inline documentation enabling use & further development by other teams / engineers.
- Worked closely with executives, group leadership & UX designers to develop team launchpad application providing gateway access to critical resources, experimental data, analytics, & high-level overview.
- Implemented complex content animation considering variables such as user time of day, location, dark/light-mode setting, mobile vs. desktop using CSS Animations & JS 'Web Animations' API, enhancing user engagement & application performance.

Nike Inc.
Senior Application Engineer
March 2021–Feb. 2022
Global Enterprise Architecture
WHQ, Portland, OR

- Lead development of front-end application—demonstrated company-wide by Senior Vice President of Global Architecture—enabling authenticated creation / secure deployment of dedicated AWS resources for arbitrary purposes by providing link to Docker / AWS image (e.g. Nginx, MySQL) with zero-config analytics via Splunk or other services.
- 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.
- 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."
- 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.
- Designed, developed, & maintained globally utilized Nike design system enabling enterprise-wide consistency in user-experience & branding.

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About (continued)

I graduated from Reed College in 2015 with a B.A. Physics. Throughout the course of my senior year, I authored a formal thesis, an opportunity to contribute to the academic physics community. I sought to quantify subjective visual characteristics (e.g. 'naturalness') of patterns in nature (such as the patterns formed by coral reef). I examined patterns created by a set of time-variant nonlinear differential equations which model complex chemical reactions (i.e. 'reaction-diffusion'), equations pioneered by Alan Turing. Utilizing a new & increasingly complex mathematical technique 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 https://thesis.joel.fm.

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

Select Experience

Nike Inc. (continued) — Senior Web Developer

- 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. — Senior Web Developer

April–Sept. 2020
San Jose, CA (remote)
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 robust type-checking in eBay TypeScript libraries, enabling accelerated development & minimizing errors.
- Developed underlying JavaScript for eBay's open-source project Marko, a declarative HTML-based 'meta-language' combining HTML, CSS, & JavaScript.
- Wrote comprehensive React component tests using Jest, Enzyme to ensure stability & uniformity.
- Authored rich, playground-style Storybook documentation of eBay Skin React components, furthering their flexibility & adoption while enhancing understanding with interactive examples.

Tripwire Inc. — Lead Full-Stack Engineer

July 2019–Feb. 2020
Portland, OR
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. — Resident Physicist & FlyKnit Innovation Engineer

Feb. 2016–Mar. 2017
WHQ, Beaverton, OR
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 — Bachelor of Arts in Physics

Aug. 2011–May 2015
Portland, OR
Class of 2015 | Advisor: Daniel Borrero
Thesis: *Looking at Pictures: Topological analysis of complex reaction-diffusion systems*
⟨online at thesis.joel.fm⟩