

Patrick Canfield

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San Francisco

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15+ years full-stack software engineer specializing in JavaScript/TypeScript, 3D web technologies, and AI integration with proven expertise in performance optimization and complex system architecture.

Demonstrated ability to reduce response times by 30% and improve user engagement through innovative solutions spanning edtech, healthtech, and gaming. Currently building AI-powered educational tools and passionate about emerging technologies including WebGL and machine learning applications.

Seeking to leverage deep technical expertise and entrepreneurial experience to drive innovation at a forward-thinking company.

Relevant Experience

Senior Software Engineer

Socratic Garden

San Francisco, CA

Oct 2024 - May 2025

Built AI-powered Socratic tutor using Next.js and OpenAI API. Integrated Stripe payments for instructor-generated materials marketplace. Increased reach 800% and reduced CPC by 50% with automated multilingual Google ads generation with Python/AI. Collaborated with product managers to deliver high-quality software within tight deadlines.

Indie Game Developer

San Francisco, CA

Jan 2023 - Oct 2024

Developed web-based video game and level editor using THREE.js, Blender, TypeScript, and [ECS/Actor architecture](#). Volunteered teaching kids media literacy, art, and technology at Museum of Art and Digital Entertainment. Completed Object-Oriented Design course from INRIA.

Senior Software Engineer

Mappa Labs

San Francisco, CA

Sep 2022 - Jan 2023

Implemented A* pathfinding for dynamically generated 3D environments on touch devices. Optimized JavaScript performance for mobile platforms. Built visual debugging system for path-finding algorithms. Identified and resolved critical physics engine bugs. Mentored junior engineers on best practices.

Independent Software Developer

San Francisco, CA

Jan 2022 - Aug 2022

Created web-based multiplayer MIDI instrument using TypeScript, SVG, WebSockets, and Elixir.

Developed multiplayer game with Canvas API and real-time communication.

Senior Software Engineer

Infinite Reality

San Francisco, CA

Jul 2021 - Jan 2022

Built system transforming GeoJSON into interactive 3D environments during gameplay. Reduced response time by 30% through algorithm optimization. Maintained comprehensive technical documentation. Led code reviews and participated in agile ceremonies.

Independent Software Developer

San Francisco, CA

Jan 2021 - Jul 2021

Developed 3D multiplayer game using TypeScript, THREE.js, WebSockets and Elixir with real-time synchronization and interactive gameplay mechanics.

Senior Software Engineer

Rally Health

San Francisco, CA

Oct 2018 - Jan 2021

Deployed Kubernetes microservice reducing time to first meaningful paint by 15%. Extended Slack bot for PR management. Published engineering blog article on HTTP connections. Mentored junior engineers and established coding standards. Resolved critical production issues.

Co-founder

EventRay

San Francisco, CA

Nov 2016 - Feb 2018

Designed and built WYSIWYG registration form editor. Created intuitive, responsive user interfaces. Implemented comprehensive unit testing framework. Established version control workflows.

Software Engineer

Metromile

San Francisco, CA

Mar 2016 - Nov 2016

Accelerated UI development with rapid-prototyping scaffolding. Built trip visualization with interactive maps. Created Angular directives for loading animations and image optimization. Resolved critical race conditions in customer-facing application.

World Traveler

Sep 2014 - Feb 2016

Visited 19 countries while living from a backpack, developing cultural awareness and adaptability.

Software Engineer

Synack

Menlo Park, CA

Jun 2014 - Sep 2014

Built ID verification flow using REST API for secure platform scaling. Transitioned JavaScript to strict mode for improved error handling. Introduced Jasmine unit testing for business-critical code.

Software Engineer

Constant Contact

San Francisco, CA

May 2013 - Apr 2014

Established front-end JavaScript best practices for maintainability and performance. Introduced Backbone.js, improving development efficiency by 2x. Shaped emerging internal platform API as early adopter.

Co-founder

EventRay

Santiago, Chile

Mar 2012 - Feb 2013

Created presentation securing acceptance into Chilean government startup incubator. Defined MVP with co-founders. Designed and implemented user interfaces using Backbone.js and CSS.

Embedded Software Developer

ADTEC DIGITAL

Jacksonville, FL

Jun 2008 - Dec 2011

Developed embedded Linux software using GNU C/C++. Created comprehensive technical documentation including architecture diagrams and API specifications. Demonstrated strong debugging and problem-solving capabilities.

Software Developer Intern

Addison Commercial Real Estate

Jacksonville, FL

Aug 2006 - Sep 2008

Built admin portal using LAMP stack enabling non-technical property listing updates. Designed responsive web pages with cross-browser compatibility. Documented system architecture and technical specifications.

Education

Bachelor of Science in Computer Science (University Honors)

University of North Florida

Jacksonville, FL

Sep 2004 - May 2009