### Erin Van Brunt

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Portfolio: www.erinvanbrunt.com | LinkedIn | GitHub | Medium Blog

# **Full-Stack Software Engineer**

Versatile Full-Stack Software Engineer with a strong focus on front-end development and a growing expertise in AI and machine learning. Skilled in creating user-friendly, responsive web applications and interactive games that blend technical precision with artistic sensibility to deliver high-quality, intelligent user experiences. Proficient in solving complex problems and transforming them into elegant, innovative solutions.

#### **Technical Skills**

Languages & Frameworks: JavaScript (ES6+), TypeScript, React.js, Node.js, Express.js, Ruby on Rails, Next.is, ¡Query, Sinatra, HTML5, CSS3, SQL, Python, Ruby, Java, JSX

Database & State Management: MongoDB, PostgreSQL, MySQL, SQLite, Redux, React Hooks, Local Storage, Data Structures

Deployment & Server Configuration: Nginx, GoDaddy VPS, SSH, SSL certificate management, Environment Variables, Secure Deployment Practices

Web Technologies & API Integration: RESTful API Design, Server-Side Rendering, JWT, OAuth, bcrypt, Axios, Fetch API, Web Audio API, HTML5 Canvas, Custom React Hooks, CORS configuration

**Development Tools & Practices:** Git, GitHub, VSCode, npm, Heroku, Netlify, Agile, Scrum, TDD/BDD, RSpec, Responsive Design, Cross-Browser Compatibility, Mobile-First Development, Component-based Architecture, Collision Detection (AABB)

UI/UX & Design: CSS Grid, Flexbox, Media Queries, CSS Keyframes, CSS Animations, Wireframing, Pixel Art Design

**EDA & AI Tools:** Cadence Virtuoso IC6.1, Claude AI.

#### **Projects**

### Professional Portfolio Deployment

Deployed a full-stack portfolio website hosted on a GoDaddy VPS with AlmaLinux 8, featuring secure data handling, responsive design, and optimized production configuration. Configured Nginx for HTTP and HTTPS traffic management, integrated a Node.js backend with MongoDB for shop functionality, and implemented environment variable management through .env files for development and production. SSL certificates ensure data security, while CORS policies allow API requests from multiple domain variations. Server is was adapted to automate static file serving and support a seamless production setup.

GitHub | Live Demo

Full-Stack E-Commerce Platform: Evie & Co.

Developed a comprehensive e-commerce solution using React.js for the frontend and Node.js with Express.js for the backend, integrated with MongoDB. Implemented secure user authentication with JWT and bcrypt, along with a robust shopping cart system and intuitive product browsing experience. Utilized React Hooks for efficient state management and implemented RESTful API design principles.

GitHub | Live Demo | Video Walkthrough

### Cemetery Run: Retro-Inspired Arcade Game

Engineered an engaging endless runner game using React.js and HTML5 Canvas, featuring custom pixel art and retro-style graphics. Implemented complex game mechanics, including collision detection, dynamic difficulty scaling, and custom controls for both desktop and mobile. Utilized requestAnimationFrame for smooth animations and game loop management. Integrated Web Audio API for immersive sound effects and background music, with user-controlled audio settings.

GitHub | Live Demo | Video Walkthrough

#### Interactive Crossword Puzzle

Designed and developed a React-based crossword puzzle game with advanced state management and custom keyboard navigation. Implemented a sophisticated grid generation algorithm and intricate word highlighting system. Created a responsive design using CSS Flexbox and media queries for seamless play across various devices.

GitHub | Live Demo | Video Walkthrough

### **Dynamic Blog Content Integration**

Developed a React-based platform that dynamically fetches and displays blog posts from Medium using Axios and the RSS2JSON API. Implemented error handling and loading states to ensure a smooth user experience. Designed a unique 80's sci-fi inspired interface with custom CSS animations and transitions, fully responsive across all devices.

GitHub | Live Demo | Video Walkthrough

# **Professional Experience**

**Restaurant Manager** | April 2014 - Present Alamo Drafthouse, San Antonio, TX | Persephone, Aptos, CA | Mazzi's, Eugene, OR

Led teams of 15+ employees, driving a 20% increase in sales through optimizing operations, improving workflows, and refining inventory management. Developed data-driven strategies to enhance operational efficiency and ensure smooth day-to-day functions. Managed key areas including scheduling, staffing, inventory, bookkeeping, and social media marketing, while ensuring compliance with health and safety regulations. Strong focus on team leadership, communication, and problem-solving, which resulted in improved team productivity and customer satisfaction. This role required a high level of adaptability, attention to detail, and a solution-oriented mindset, skills that are valuable in any professional environment.

**Layout Engineer** | February 2011 - March 2015 Analog Devices, San Jose, CA Designed and optimized over 50 analog and digital layouts for ICs in mobile devices using Cadence Virtuoso IC6.1. Utilized Cadence tools for schematic capture, layout design, and simulation, ensuring precise alignment and adherence to design rules. Conducted DRC and LVS

verifications using Cadence Assura, reducing error rates. Collaborated with cross-functional teams to optimize circuit performance and layout efficiency.

## **Education**

Arizona State University | Principles of Programming with Java | 2023 Flatiron School | Full-Stack Software Engineering | 2022 General Assembly | Software Engineering Immersive | 2021 Silicon Design Institute | Mask Design / Layout Engineer | 2011-2013 Portland Community College | Art / Mathematics Major | 2009-2011 Cabrillo College | Art History Major | 2007-2009