

Erin Van Brunt

Eugene, OR | (541) 543-4781 | erinmontybruce@gmail.com
Portfolio: 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.js, jQuery, 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, Collision Detection (AABB), Custom React Hooks, CORS configuration

Development Tools & AI: Git, GitHub, VSCode, npm, Heroku, Netlify, Claude AI, Agile, Scrum, TDD/BDD, RSpec, Responsive Design, Cross-Browser Compatibility, Mobile-First Development, Component-based Architecture, Cadence Virtuoso IC6.1

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

Projects

Professional Portfolio Deployment | November 2024

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, applied a Node.js backend with MongoDB for shop functionality, and configured 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.js was adapted to automate static file serving and support a seamless production setup

Technologies Used: AlmaLinux 8, Nginx, Node.js/Express, MongoDB, CORS, Environment Variables

GitHub | Live Demo

Full-Stack E-Commerce Platform: Evie & Co. | October 2024

Created a comprehensive e-commerce solution applying React.js for the frontend and Node.js with Express.js for the backend, integrated with MongoDB.

- Established secure user authentication with JWT and bcrypt, along with a comprehensive shopping cart system and intuitive product browsing experience

- Adapted React Hooks for efficient state management and implemented RESTful API design principles

Technologies Used: React, Node.js, MongoDB/Mongoose, Express.js, JWT Authentication, bcrypt

[GitHub](#) | [Live Demo](#) | [Video Walkthrough](#)

Cemetery Run: Retro-Inspired Arcade Game | October 2024

Engineered an engaging endless runner game using React.js and HTML5 Canvas, featuring custom pixel art and retro-style graphics

- Coded complex game mechanics, including collision detection, dynamic difficulty scaling, and custom controls for both desktop and mobile
- Leveraged requestAnimationFrame for smooth animations and game loop management
- Incorporated Web Audio API for immersive sound, with user-controlled audio settings

Technologies Used: React 17.0.2, HTML5 Canvas API, requestAnimationFrame, Custom Game Physics

[GitHub](#) | [Live Demo](#) | [Video Walkthrough](#)

Interactive Crossword Puzzle | September 2024

Designed and built a crossword puzzle game featuring complex data structure manipulation and dynamic state management

- Engineered an advanced grid generation algorithm that maps and transforms question-answer pairs into an interactive game board, handling multi-directional words and intersecting letters
- Streamlined sophisticated keyboard navigation and word highlighting system using React's useState and useEffect hooks
- Created a responsive design using CSS Flexbox and media queries for seamless play across various devices

Technologies Used: React Hooks (useState, useEffect, useCallback), Complex Data Structure Mapping, Custom Grid Generation Algorithm, Dynamic State Management, CSS Grid/Flexbox

[GitHub](#) | [Live Demo](#) | [Video Walkthrough](#)

Dynamic Blog Content Integration | November 2024

Developed a React-based platform that dynamically fetches and displays blog posts from Medium employing Axios and the RSS2JSON API.

- Initiated robust error handling patterns with loading state management for optimal UX
- Designed an 80's sci-fi themed interface featuring custom CSS animations and responsive design

Technologies Used: React, Axios, RSS2JSON API, CSS Animations/Keyframes, Error Handling

[GitHub](#) | [Live Demo](#) | [Video Walkthrough](#)

Professional Experience

Restaurant Manager | April 2014 - Present | Pacific Northwest and Southwest US

- 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
- Demonstrated strong team leadership, communication, and problem-solving skills, resulting in improved team productivity and customer satisfaction
- Applied high level of adaptability, attention to detail, and solution-oriented mindset to drive business success

Layout Engineer | February 2011 - March 2014 | 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 Certificate | 2022

General Assembly | Software Engineering Immersive Certificate | 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