

Elysa Ward

elysabward@outlook.com | (303)-875-5603 | [LinkedIn](#) | [Github](#) | [Portfolio](#)

Summary

Software engineer with Mathematics and Computer Science background building scalable web applications using Ruby on Rails, TypeScript, and React. Experienced in AI-assisted development, AWS cloud deployment, CI/CD automation, and agile development with demonstrated ability to quickly master new technologies. Passionate about building fault-tolerant systems that create meaningful impact for users and thrive in collaborative engineering environments.

Technical Skills

Languages/Frameworks:

TypeScript, Ruby on Rails, JavaScript, React.js, Vue.js, Node.js, Next.js, Python, HTML5, CSS

AI-Assisted Development:

Prompt engineering, Claude for prototyping, debugging & learning new frameworks, critical evaluation of AI-generated code, LLM API integration (exploring)

Cloud & Deployment:

AWS (Amplify, serverless architectures - exploring), Heroku, Render, GitHub Pages, CI/CD Automation (GitHub Actions, CircleCI)

Databases & APIs:

MySQL, PostgreSQL, Redis, SQLite, DynamoDB (familiar), RESTful API, JSON, XML, API Integration

Development Tools:

Git, GitHub, npm, Webpack, Vite, Postman, Chrome DevTools, JIRA, Figma

Testing/Quality Assurance:

Test Driven Development (TDD), Unit Testing, Integration Testing, Automated Testing, RSpec, FactoryBot, Cypress, Playwright

Practices & Methodologies:

Agile/Scrum, Object-Oriented Programming (OOP), Observability & Monitoring, Error Handling & Retry Logic, Pair Programming, Code Reviews, CI/CD Pipelines, Performance Optimization, Circuit Breakers (familiar), Rate Limiters (familiar), Service Level Objectives (familiar), Cross-Browser Compatibility, WCAG Standards

Education

Accredited Certificate | Full-stack Development

Graduated 05/2025

Turing School of Software and Design | Denver, CO

B.A. in Mathematics | Minor in Computer Science

Graduated 12/2022

Metropolitan State University of Denver | Denver, CO

Projects

Portfolio

[Live Site](#) | [FE Repo](#)

Technologies: Vue.js 3, TypeScript, Vite, Vue Router, CSS, AWS (Amplify), GitHub Pages, JSON data services (migrating to Rails backend)

Modern portfolio site showcasing technical projects through interactive galleries, built from scratch while self-teaching Vue.js and TypeScript

- Architected scalable component system with 35+ nested Vue components using Composition API (ref, computed), 2 custom composable for reusable logic, and extensive TypeScript types for type safety and maintainability
- Used Claude as a learning partner to master Vue.js fundamentals—requesting concept explanations, comparing architectural patterns, debugging custom code, and prototyping UI elements—while maintaining critical evaluation of all suggestions and refactoring AI-generated code to align with project requirements and best practices
- Implemented data services pattern with 9+ utility files to manage application state from JSON files, establishing clean separation of concerns and API-ready architecture for planned Rails backend integration
- Developed with Vite build tooling and Vue Router for navigation, deployed to AWS and GitHub Pages with automated CI/CD; currently implementing responsive design and planning Redis caching for performance optimization

Tracker

[Live Site](#) | [BE Repo](#) | [FE Repo](#)

Technologies: Ruby on Rails, TypeScript, React.js, PostgreSQL, CI/CD (CircleCI), API Integration (TipTap), RSpec, Cypress, Tailwind CSS

Job tracking application that organizes contacts, target companies, and application status in a centralized dashboard

- Automated deployment pipeline using CircleCI and GitHub Actions, enabling continuous delivery to Heroku with zero-downtime deployments and automated testing
- Refactored 5+ frontend components to establish consistent design system, resolved 10+ UI bugs, and optimized codebase with isolated

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interfaces to improve maintainability and code quality

- Leveraged Claude to navigate TipTap's complex API documentation and debug challenging mouse event propagation issues while learning TypeScript—using AI to understand event defaults, troubleshoot WYSIWYG behavior triggers, and develop solutions, then testing and refining implementations through hands-on experimentation
- Conducted 15+ code reviews for team members, providing constructive feedback on React component architecture, TypeScript typing, and Rails API design patterns while maintaining 90%+ test coverage

RepRadar

[Live Site](#) | [BE Repo](#) | [FE Repo](#)

Technologies: Ruby on Rails, React.js, PostgreSQL, API Integration (5Calls API, Federal Register API), RSpec, Cypress

Web application that helps users stay informed about executive orders and connect with their representatives using zip code search; includes AI-powered scraper that generates executive order summaries from PDF documents

- Architected React frontend with 20+ reusable components and WCAG-compliant design, implementing cross-browser compatibility and responsive layouts to ensure accessibility across devices
- Implemented 10+ Rails API endpoints with Redis caching and retry logic to integrate external APIs (5Calls, Federal Register), reducing API response times by 40% and improving fault tolerance
- Served as primary debugging resource across full stack, using ChatGPT as a collaborative debugging partner to quickly diagnose issues, decipher teammates' code for efficient troubleshooting, and provide real-time technical support throughout development
- Led daily code reviews and pair programming sessions, debugging complex issues and strengthening team collaboration while maintaining 95%+ test coverage across backend and frontend

Professional Experience

Independent Tutor | Dragonfly Education | Boulder, CO

11/2025 - Present

- Provide individualized tutoring specializing in math and computer science, with support across all subjects and executive functioning skills
- Manage all business operations including scheduling, curriculum development, travel coordination, and quarterly tax obligations
- Collaborate with parents and teachers to assess student needs and develop customized, student-centered curricula that strengthen engagement and improve outcomes

Student Teacher | Denver Public Schools | Denver, CO

08/2017 - 12/2019

- Collaborated with teachers, counselors, and administrators to analyze student performance data and implement targeted interventions for 20+ students, while developing and delivering 50+ technical lessons translating complex mathematical concepts into accessible knowledge for diverse learners