

# Emma Adams

emmajsadams@gmail.com

+1-206-637-1482

[github.com/emmajsadams](https://github.com/emmajsadams)

[linkedin.com/in/emmajsadams](https://linkedin.com/in/emmajsadams)

## EXPERIENCE

### Lead Software Engineer

Supio

Remote

Feb. 2025 - Present

- Lead engineering team of 5 through full product lifecycle, driving technical architecture decisions and cross-functional collaboration to deliver AI-powered legal document automation adopted by 20+ law firms within first quarter.
- Architected production LLM orchestration system in TypeScript integrating Claude and OpenAI APIs, implementing advanced prompt engineering, context management, and RAG pipelines for rapid deployment of legal document blueprints.
- Built and deployed agentic AI systems in Python (smolagents, LangChain) for autonomous legal drafting, including expert disclosure, demand letters, and medical summary generation—reducing drafting time from hours to minutes.
- Designed and implemented real-time collaborative editing interface with integrated AI chat for contextual document verification and natural-language revisions, improving attorney workflow efficiency.
- Established organizational standards for AI-assisted development using Claude Code and GitHub Copilot, defining security protocols, code review practices, and quality gates for LLM-generated code.
- Mentor team on modern AI/ML techniques, prompt engineering best practices, and agentic system design patterns while maintaining hands-on contribution to critical path features.

### Senior Software Engineer

Hewlett Packard Enterprise

Remote

Jan. 2024 - Nov. 2024

- Architected and built production RAG evaluation platform from ground up using Go microservices, Python ML pipelines, React frontend, and distributed systems (Kubernetes, RabbitMQ, Postgres, Milvus vector DB) supporting enterprise-scale LLM validation workflows.
- Designed and implemented real-time WebSocket streaming system for live visualization of DeepEval metrics (groundedness, context relevancy, answer relevancy) during model validation, enabling data scientists to iterate on RAG configurations 10x faster.
- Established comprehensive frontend architecture and engineering standards for React applications, implementing type-safe API contracts (Orval, Zod), component testing strategies (Storybook, Jest, Playwright), and API mocking (MSW) adopted across 3 product teams.
- Optimized JupyterLab extension for managing enterprise LLM training pipelines, reducing memory footprint by 40% and improving UI responsiveness for data-intensive operations on multi-GPU clusters.
- Led technical design and architecture decisions through cross-functional collaboration, producing detailed design documents and delivering stakeholder presentations that aligned engineering execution with product strategy.

### Principal Software Engineer

Devoted Health

Remote

Feb. 2021 - Apr. 2023

- Led architectural redesign of risk adjustment engine—the company's primary revenue stream processing \$100M+ in annual CMS claim reimbursements—improving accuracy by 25% and reducing processing time from days to hours.
- Architected and delivered HIPAA-compliant medical coding annotation platform from conception to production, enabling clinical teams to process 50K+ medical records monthly with real-time collaboration and audit trails.
- Optimized critical ETL pipelines processing 10M+ healthcare claims, reducing processing time by 60% and infrastructure costs by 40% through strategic data partitioning and parallel processing architecture.
- Drove technical strategy as Principal Engineer, leading architecture reviews, establishing design patterns for Go microservices and React applications, and mentoring engineers on healthcare domain expertise and compliance requirements.
- Partnered with product leadership to translate complex healthcare regulatory requirements into technical specifications, shipping 5 major product features that directly enabled business growth from 10K to 50K members.

### Lead Senior Software Engineer

Humble Bundle

Remote

Jul. 2018 - Jul. 2020

- Promoted to Lead Senior Software Engineer II, managing team of 5 engineers on Platform team supporting high-traffic e-commerce platform serving 26M monthly page views and processing millions in transactions.
- Led company-wide internationalization initiative for 8-year-old monolithic Python/React application, architecting localization system adopted across all product teams and expanding market reach to 15+ countries.
- Architected and executed critical security migration to TOTP two-factor authentication and OAuth Google login for entire user base (5M+ accounts), achieving zero-downtime deployment with comprehensive rollback strategy.
- Built and shipped core e-commerce features in Python Django and React handling payment processing, inventory management, and promotional campaigns for high-profile game and book bundles.
- Developed engineering talent through hands-on mentorship including weekly 1-on-1s, code review standards, pair programming sessions, and career development planning—resulting in 2 promotions within team.

### Mid-Level Software Engineer

Committee for Children

Seattle, WA

Jan. 2018 - Aug. 2018

- Led technical modernization replacing decade-old DNN monolith with microservices architecture using React and .NET Core, improving page load times by 70% and enabling rapid feature development for education platform serving 100K+ students.
- Architected and executed zero-downtime migration of authentication system to IdentityServer4 OpenID Connect, consolidating multiple legacy authentication mechanisms while maintaining backward compatibility.
- Refactored critical business logic from 50+ untested stored procedures into well-tested C# WebAPI services, implementing comprehensive test coverage and establishing CI/CD pipeline for automated deployments.
- Built full-stack coursework tracking system with TypeScript React frontend and ASP.NET Core backend, enabling teachers and administrators to monitor student progress in real-time across multiple educational programs.

## Full Stack Software Engineer

Jul. 2013 - Dec. 2017

Trov

Remote

- Built core on-demand insurance platform from inception using ASP.NET C#, SQL Server, and TypeScript React, enabling users to instantly insure high-value items (electronics, jewelry, sports equipment) with pay-per-use pricing model.
- Developed full-stack claims management and policy administration system handling underwriting, premium calculation, and claims processing workflows for insurance operations team.
- Architected and implemented business intelligence system in Python for real-time partner data integration, enabling white-label insurance offerings for major retail partners.
- Championed engineering quality practices including comprehensive unit and integration testing, code reviews, and continuous integration—establishing foundation for scalable remote-first engineering culture.

## Undergrad Researcher and Web Instructor

Jan. 2012 - Nov. 2013

University of Washington

Seattle, WA

- Lead developer for TypeScript library abstracting cloud storage services (Dropbox, Google Drive, AWS) and contributed to published research paper on cloud storage abstraction.
- Taught modern web development standards to university staff and students while developing course management and support ticket applications using Python and Django.

## EDUCATION

### Bachelor of Science in Informatics

University of Washington Seattle

GPA: 3.87

2011 - 2014

- Informatics as my major taught an interdisciplinary approach to technology covering topics a range of topics including computer science, business, design, user experience, and project management. It encouraged a broad foundation, but deep specialization within a given field. Within this major, I specialized in computer science.

## PROJECTS

### Wright – Agentic Context Engineering CLI

- A TypeScript CLI implementing Agentic Context Engineering (ACE) with ReAct (Reasoning + Acting) methodology for self-improving AI context systems.
- Features a three-agent pipeline: ReActGeneratorAgent performs tool-enabled reasoning, ReflectorAgent extracts insights, and CuratorAgent updates evolving knowledge bases.
- Prevents context collapse through structured bullet accumulation and always-on ReAct reasoning, creating versioned knowledge that improves over time.

### Minerva

- Personal productivity application blending task management with introspective design and a serene aquatic aesthetic.
- Features real-time task synchronization via Convex, rich markdown notes, and AI-powered productivity tools in a thoughtfully crafted interface.
- Emphasizes personal growth through glass morphism effects, fluid animations, and thoughtful typography that transforms productivity into a meditative experience.

### TypeScript Database

- A transactional in-memory database for TypeScript featuring a full REPL interface for interactive key-value operations.
- Supports nested transactions with BEGIN/ROLLBACK/COMMIT, enabling complex data manipulation with type safety and clean architectural separation.
- Built with extensibility in mind - modular command parsing and pluggable storage backends for different key-value type systems.

### dstruct

- A comprehensive data structures library for TypeScript, created as a learning exercise and exploration of algorithmic design.
- Implements 15+ structures including Red-Black trees, hash/tree maps, bmaps, multisets, and more - inspired by Java Collections, C# Collections, and Google Guava.
- Features type-safe implementations with ES6 Map support, demonstrating foundational CS concepts in modern TypeScript.

## TECHNICAL SKILLS

**Programming Languages:** Python, TypeScript, C#, Go, SQL, Bash

**Web Development:** React, TailwindCSS, PostCSS, Next.js, TanStack, shadcn, Node.js, FastAPI, ASP.NET MVC, Flask, Bun, HTML/CSS

**Data & AI:** OpenAI API, Claude API, smolagents, LangChain, LangSmith, RAG, pandas, NumPy, jupyter, PyTorch

**Cloud & DevOps:** AWS, Google Cloud, Microsoft Azure, Cloudflare, DigitalOcean, Vercel, Docker, Kubernetes

**Databases:** PostgreSQL, MySQL, MSSQL, DynamoDB, Amazon RDS, Elasticsearch, Redis, Convex

**Developer Experience & Tooling:** Claude Code, Cursor, VSCode, Cursor, Git, Linux, npm/pnpm, webpack/vite, ESLint/Prettier/Biome, pip/uv

**Leadership & Collaboration:** Technical architecture and system design leadership, Engineering team mentorship and career development, Cross-functional collaboration with product and design, Establishing engineering standards and best practices, Strategic technical planning and execution