

Emma Adams

emmajsadams@gmail.com

+1-206-637-1482

github.com/emmajsadams

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