Emma Adams

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EXPERIENCE

Lead Software Engineer
Feb. 2025 - Present

Supio

Remote

- Lead engineering team of 5 and partner with product, design, and legal subject matter experts to deliver AI-powered legal document automation adopted by 20+ law firms within first quarter, driving technical architecture decisions through full product lifecycle.
- 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.
- Collaborated with product and design teams to build 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 techniques, context engineering best practices, and agentic system design patterns while maintaining hands-on contribution to critical path features.

Senior Software Engineer
Jan. 2024 - Nov. 2024

Hewlett Packard Enterprise

Remote

- Partnered with product managers and data science teams to architect and build 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.
- Collaborated with AI research teams to optimize 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 with product, design, and AI research teams, producing detailed design documents and delivering stakeholder presentations that aligned engineering execution with product strategy.

Principal Software Engineer
Feb. 2021 - Apr. 2023

Devoted Health

Remote

- Led architectural redesign of risk adjustment engine (the company's primary revenue stream), improving accuracy and reducing processing time.
- Partnered with clinical operations and product teams to architect and deliver HIPAA-compliant medical coding annotation platform.
- Optimized critical ETL pipelines, reducing processing time and infrastructure costs 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.
- Collaborated with product, clinical operations, and regulatory teams to translate complex healthcare regulatory requirements into technical specifications.

Lead Senior Software Engineer
Jul. 2018 - Jul. 2020

Humble Bundle

Remote

- Promoted to Lead Senior Software Engineer II, managing team of 5 engineers and partnering with product and business development teams on Platform team supporting high-traffic e-commerce platform serving 15M monthly page views and processing millions in transactions.
- Led cross-functional company-wide internationalization initiative for 8-year-old monolithic Python/React application, coordinating with product, design, and content teams to architect localization system adopted across all product teams and expanding market reach to 15+ countries.
- Partnered with security and product teams to architect and execute critical security migration to TOTP two-factor authentication and OAuth Google login for entire user base (12M+ 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.

Mid-Level Software Engineer
Jan. 2018 - Aug. 2018

Committee for Children

Seattle, WA

- Led technical modernization replacing decade-old DNN monolith with microservices architecture using React and .NET Core, improving page load times by 70% for education platform serving 100K+ students.
- Refactored critical business logic from 50+ untested stored procedures into well-tested C# WebAPI services and migrated authentication to IdentityServer4 OpenID Connect, establishing CI/CD pipeline for automated deployments.

Full Stack Software Engineer
Jul. 2013 - Dec. 2017

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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 with pay-per-use pricing model.
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Developed claims management, policy administration, and business intelligence systems handling underwriting, premium calculation, and partner data integration for white-label insurance offerings.

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 at UW is a technically rigorous Bachelor of Science degree focused on designing, building, and securing complex information systems through programming, data modeling, software architecture, and human-centered computing.

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, bimaps, 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, 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