Ashish Reddy Jaddu

Full-Stack Engineer | AI-Powered Products

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SUMMARY

Full-stack engineer with **3+ years of experience** building and shipping **AI-powered products** end-to-end. Expert in **Next.js/React frontends**, **Python/Django backends**, and **LLM integrations** with proven track record shipping features across **4 product pivots** in fast-paced startup environments. Strong in **full-stack development**, **RAG systems**, **real-time architectures**, **cloud infrastructure**, and translating complex AI workflows into intuitive user experiences.

PROFESSIONAL EXPERIENCE

LEGISIMPLE — **MONTREAL, CANADA**

Full-Stack Engineer (Founding Engineer) — **JULY 2024 – FEB 2026**

AI-native legal-tech startup building research and workflow automation tools for law firms.

- **Built and shipped complete AI-powered products** across **4 major pivots** in 9 months, developing **Next.js/React frontends**, **Python/Django backends**, and **Azure OpenAI integrations** for legal research, case analysis, and workflow automation, demonstrating rapid product iteration in fast-paced startup environment.
- **Architected end-to-end RAG pipeline** for legal case law retrieval, building scalable **document ingestion**, **NLP parsing**, **vector search** (Pinecone, Azure AI Search), **LLM integration** (OpenAI GPT-4), and **semantic retrieval** serving **120k documents** with **87% accuracy** and **sub-second latency**, handling full stack from data processing to user interface.
- **Designed and implemented real-time AI dashboard** using **Next.js**, **React**, **Azure SignalR/WebSockets**, and **Python async processing** (Celery), enabling lawyers to monitor AI-powered legal research jobs with **sub-second UI updates**, **progress tracking**, and **human-in-the-loop validation** for AI-generated insights.
- **Built sophisticated state management** for complex AI workflows using **Zustand** and **Redux**, managing **multi-step legal research flows**, **real-time AI job status**, **user feedback loops**, and **document annotations** across multiple interconnected React components.
- **Developed AI-powered research interface** with **human-in-the-loop validation**, designing UX for reviewing **LLM-generated legal citations**, **case summaries**, and **research recommendations**, enabling lawyers to validate, edit, and approve AI outputs before finalizing legal documents.
- **Implemented model evaluation** on **Vertex AI**, building feedback loops from user corrections to improve RAG retrieval quality from **82% → 87%**, demonstrating full ownership of AI product lifecycle from user feedback to model improvement.
- **Optimized full-stack performance** by implementing **Redis caching**, **SQL query optimization**, **lazy loading**, **code splitting**, and **API response compression**, reducing page load times by **30%** and memory usage by **25%** while maintaining seamless UX for AI-powered features.
- **Deployed production infrastructure** on **Azure using microservices architecture** with **App Services**, **Azure SQL**, **Durable Functions**, **VNets**, and **Application Insights**, implementing **CI/CD pipelines**, **Docker containerization**, **Kubernetes orchestration**, **automated testing**, **monitoring**, and **cost optimization** to maintain **99.9% uptime** for AI-powered legal platform.

KEYWORDS STUDIOS — **MONTREAL, CANADA**

Functional Quality Assurance — **JUN 2023 – JUL 2024**

Global gaming and software QA company providing functional testing, localization, and quality assurance services.

- **Performed comprehensive full-stack testing** across **web applications, mobile apps**, and **AI-powered products**, validating **frontend UI/UX, backend APIs, database operations, AI model outputs, and end-to-end user workflows** to ensure production quality across entire application stack.
- **Conducted UI/UX testing and validation for responsive designs, cross-browser compatibility** (Chrome, Firefox, Safari, Edge), **mobile responsiveness** (iOS/Android), and **accessibility standards** (WCAG), identifying and documenting **200+ UI/UX issues** with detailed reproduction steps.
- Tested backend services and APIs including **RESTful endpoints, data integrity, error handling, SQL operations, data pipeline validation,** and AI/ML feature integration, ensuring reliability and consistency across full application architecture.
- **Collaborated with cross-functional teams** using Jira and Bugzilla to document bugs, communicate with developers and designers, prioritize issues, and ensure timely resolution of critical defects across frontend, backend, and AI components before production releases.

HCL TECHNOLOGIES **HYDERABAD, INDIA**
Software Engineer **OCT 2020 – JAN 2022**

- **Developed and deployed RESTful APIs** using **Python** and **Node.js** to power internal React applications, implementing **MySQL query optimization** and **database indexing** strategies that improved response times by **~10%** and page-load performance by **~20%**.
- **Built database-backed defect tracking system** and debugged complex production issues across backend services, improving overall system **stability** and **QA effectiveness by ~40%**, while managing **CI/CD pipelines** and deployment infrastructure for **5 web applications on Heroku**, optimizing resource allocation to reduce **hosting costs by ~15%** and improve release reliability.

EDUCATION

CONCORDIA UNIVERSITY **MONTREAL, CANADA**
Master of Science in Applied Computer Science **SEPT 2022 – APR 2024**

GEETANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY **HYDERABAD, INDIA**
Bachelor of Technology in Computer Science **JUNE 2016 – SEPT 2020**

TECHNICAL SKILLS

- **Frontend & UI Development:** Full Stack Development, Web Development, Next.js, React.js, TypeScript, JavaScript, HTML/CSS, Tailwind CSS, responsive web design, mobile-first design, state management (Zustand, Redux), component architecture, real-time UI (WebSockets, SignalR), lazy loading, code splitting
- **Backend & APIs:** Python, Django, Flask, FastAPI, Node.js, Express.js, RESTful APIs, GraphQL, API design, API integration, microservices, system design, async processing (Celery), serverless functions (Azure Durable Functions), API optimization
- **AI & LLM Integration:** OpenAI API (GPT-4), Azure OpenAI, LLM integration, Retrieval-Augmented Generation (RAG), prompt engineering, human-in-the-loop workflows, AI-powered features, model evaluation, feedback loops
- **Vector Search & Embeddings:** Vector databases (Pinecone, Azure AI Search), embedding generation, semantic search, hybrid search, document retrieval
- **Cloud & Infrastructure:** AWS, Azure (App Services, Azure SQL, Durable Functions, VNet, Azure OpenAI, Application Insights, SignalR), Docker, Kubernetes, CI/CD (GitHub Actions), infrastructure as code, monitoring & observability
- **Data & Databases:** Azure SQL, PostgreSQL, MySQL, MongoDB,Neo4j, database design, query optimization, indexing strategies, Redis caching, data modeling, ETL pipelines
- **Performance & Optimization:** Performance optimization, caching strategies (Redis), query optimization, lazy loading, code splitting, API response compression, memory management, cost optimization
- **Product & Collaboration:** Product development, rapid prototyping, Agile/Scrum methodologies, sprint planning, user feedback integration, A/B testing, product analytics (Mixpanel, PostHog), cross-functional collaboration
- **Testing & Quality:** Jest, React Testing Library, pytest, unit testing, integration testing, E2E testing, test-driven development (TDD), QA best practices, bug tracking (Jira)
- **Development Tools:** Git, GitHub, VS Code, Jupyter Notebooks, Azure DevOps, Chrome DevTools, Postman
- **Data Engineering & NLP**: Document parsing, NLP, data ingestion pipelines, data preprocessing, chunking strategies, metadata extraction