

James Lussier

Denver, CO 80206 | 970-994-0254 | jimlussier94@outlook.com | in/jim-lussier-750597420

Professional summary

Senior Software Engineer with +8 years of experience delivering scalable backend systems and AI-driven workflows. Led the development of a cloud-native advertising platform that cut time-to-first-ad by 6× and reduced campaign setup errors by 70%, and built a multi-agent OpenAI orchestration that shortened creative production from hours to minutes. Skilled in API design, cloud services (AWS, Azure, GCP), and AI/ML integration, with a track record of mentoring engineers. Seeking to apply this expertise to drive high-performance, cost-effective solutions for the organization.

Skills

- **AI Automation & Agents:** Agentic AI, Agentic Applications, Multi-agent Orchestration, Agentic Workflows-, AutoGen, AI Agent Development, AI Workflow Automation, AI-assisted Software Development, AI-powered Process Automation, Applied LLM Engineering
- **AI/ML Tools & Automation:** LLMs, RAG Pipelines, Langchain, Langgraph, Langfuse, OpenAI, Claude, Anthropic LLM-, Generative AI, Multimodal AI, Text-to-Image, Text-to-Speech, Speech-to-Text, Deepgram, LiveKit, n8n, Embeddings, Vector Databases, LangSmith, Cursor, Claude Code, Cort Design, AI Integration, Pinecone
- **Programming Languages & Frameworks:** Python, JavaScript, Typescript, Java, React, Next.js, Node.js, FastAPI, Flask, SQL, Nuxt.js, Django, Django REST Framework, Vue.js, PostgreSQL, GraphQL, C#, .NET, Spring Boot
- **Cloud & DevOps:** AWS (Lambda, DynamoDB, EC2, S3, SageMaker, Bedrock), Github Action, CI/CD, Docker, GCP, Runpod, Automated Deployments, Version Control, Azure, Containerized Infrastructure, Terraform, MCP Servers

Work history

Laptop Freedom

May 2025 - Apr 2026

Senior Agentic AI Engineer

Orlando, FL

- Architected Rocketeer ads platform as a scalable software system using Java Spring Boot microservices and domain-driven data modeling on PostgreSQL relational databases that onboarded thousands of non-technical entrepreneurs, delivering 6x faster time to first ad and sub-10-minute campaign launches.
- Integrated the Facebook Marketing API and Mapbox to enable end-to-end campaign management with geographic targeting, reducing campaign setup errors by 70% and eliminating reliance on Meta Ads Manager.
- Built an n8n workflow orchestrating 5-7 OpenAI agents with AutoGen and prompt engineering, creating agentic workflows that automated ad copy and creative generation with Nano Banana text-to-image, cutting production time from hours to 2 minutes.
- Applied LLM engineering to evaluate emerging models such as OpenClaw and NemoClaw with LangSmith, benchmarked ad quality using Claude Code and LangGraph, and defined selection criteria to guide the platform's long-term AI investment strategy toward models that improve ad relevance.
- Built containerized infrastructure on MCP servers and CI/CD pipelines using Docker, Terraform, and GitHub Actions, reducing deployment time by 80% and supporting weekly releases with near-zero production incidents.
- Mentored junior developers via GitHub code reviews, pair-programming sessions, and architecture guidance on Node.js and React projects, cutting new-hire ramp-up from one month to one week, lowering bug rates in shipped code, and boosting overall team velocity.

FranklinCovey Co

Oct 2020 - Apr 2025

Full Stack AI Software Engineer

Draper, UT

- Produced and optimized backend services and RESTful APIs with C#, .NET, and SQL databases, enabling high throughput, low-latency financial analytics and secure authentication, which reduced processing delays and ensured safe handling of student information.
- Led full-stack development and defined AI-powered features architecture for education applications using React, Vue.js (Nuxt.js), Next.js, Python, TypeScript, and GraphQL, resulting in streamlined learning workflows and improved communication between students and instructors.
- Implemented multi-threaded backend services using FastAPI and WebSockets to support real-time voice streaming, speech-to-text transcription, and concurrent audio sessions at production scale, enabling live classroom environments to run smoothly without interruption.
- Expanded Generative AI learning tools using Anthropic LLMs, the OpenAI SDK, and Cursor, applying agent development to reduce educator preparation time by up to 45% through automated lesson planning and content summarization.

- Built multimodal, voice enabled AI learning assistants that handled student onboarding, performed real time transcription of lectures, and enabled conversational tutoring using Whisper, Deepgram, LiveKit, and custom LLM pipelines, resulting in faster onboarding and higher student engagement.
- Designed vector database architectures and RAG systems with large-scale multimodal data handling and embeddings to deliver context-aware learning insights, helping instructors make faster, more informed instructional decisions while keeping student data FERPA compliant.
- Deployed production AI systems on AWS SageMaker and Bedrock using Terraform across Azure and GCP, reducing inference costs by 40% while scaling to millions of monthly requests.
- Upgraded advanced summarization systems that generated high quality lecture notes, study guides, and session summaries, reducing instructor documentation time by 40% across 10,000+ monthly learning sessions.
- Established automated workflows in Nuxt.js by building LLM-driven agents that triage student inquiries, extract learning insights, and streamline instructor documentation; integrated CRM data and deployed the solution in Docker containers, cutting annual entry effort and accelerating grading and feedback processes.

Unlesh

Oct 2018 - Sep 2020

Software Developer

Denver, CO

- Engineered full-stack applications with React, Next.js, Node.js, and Python that modernized learning management and academic operations, resulting in faster course setup and reduced administrative workload for education clients.
- Delivered custom software solutions that improved enrollment forecasting accuracy by 15%, streamlined tracking of 5,000+ learning resources and digital assets across multiple campuses, and strengthened program oversight for multi-site academic institutions.
- Designed scalable backend services on AWS using C# and .NET Core with multi-threaded architecture to securely handle FERPA-aligned student data and deliver 99.9% uptime for learning platforms, enhancing system reliability for academic users.
- Built responsive interfaces with Tailwind CSS that improved data-visualization clarity for academic dashboards, enabling faculty and administrators to make faster instructional decisions and reducing onboarding time for new users by 40%.
- Established CI/CD pipelines with GitHub Actions to automate testing, code reviews, and deployments, reducing release cycles from weeks to days and improving code quality across distributed development teams supporting education clients.
- Collaborated with UX/UI designers through structured design reviews and Figma handoffs, translating pedagogical requirements into WCAG-compliant React interfaces that increased student and instructor engagement on learning platforms.

The University of Texas at Dallas

May 2018 - Aug 2018

Software Engineering Intern

Richardson, TX

- Designed and developed full-stack web application to streamline volunteer coordination, reducing manual scheduling overhead and enabling 200+ church members to self-enroll in events through a centralized platform.
- Architected MySQL database and built C# .NET API endpoints to securely store and manage member contact information, eliminating reliance on disorganized spreadsheets and enhancing data accessibility for ministry leaders.
- Implemented automated email notifications with C# .NET SMTP libraries, routing volunteer applications to position managers and reducing response times from days to minutes.

Education

Bachelor's Degree, Computer Science

Aug 2016 - May 2018

The University of Texas at Dallas

Richardson, TX

Bachelor's Arts

Aug 2012 - May 2016

The University of Texas at Dallas

Richardson, TX