

Akshay Kumar

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SUMMARY

Software Developer with 5+ years of experience building scalable backend systems and AI-powered solutions in healthcare and finance. Skilled in cloud-native development, Generative AI, and Agentic AI, delivering impactful products.

SKILLS

Languages & Frameworks: Python, JavaScript, TypeScript, SQL, FastAPI, Django, Flask, React.js, Node.js, GraphQL
Databases & Data: PostgreSQL, MySQL, Oracle, MongoDB, Redis, DynamoDB, Pandas, NumPy, Elasticsearch
Cloud & DevOps: AWS, Azure, GCP, Docker, Kubernetes, Terraform, Git, GitHub Actions, Jenkins, Splunk
AI/GenAI & Tools: TensorFlow, SageMaker, MLFlow, LLMs, RAG, Bedrock, Vertex AI, Azure AI Foundry
System Design: Microservices, Event-Driven Architecture, Distributed Systems, Scalability, Caching
Certifications: AWS Certified Developer - Associate

WORK EXPERIENCE

Mercor

San Francisco, CA

AI Developer

February 2025 – May 2025

- Architected AI support assistant with Python, LangChain, and ChromaDB, handling 300+ daily queries with 95% accuracy using scalable microservices, secure APIs, and async workflows.
- Streamlined data analysis with SmolAgents and tool calling, cutting build failures and troubleshooting by 60%.

Eli Lilly and Company

Bangalore, India

Software Engineer

June 2022 – Dec 2023

- Engineered scalable microservices and backend applications using Django and FastAPI with secure authentication for global pharmaceutical supply chain platform serving 93 countries.
- Designed real-time data architecture integrating PostgreSQL and NoSQL datastores with secure RESTful APIs, documented using Swagger/OpenAPI standards.
- Led 4-person team automating incident response with Python and Shell scripting, cutting support resolution time by 75% with real-time monitoring and alerts.
- Set up CI/CD with Jenkins, Git, Docker, and Terraform, reducing release cycles from 4+ hours to under 20 minutes using blue-green deployments on AWS.

CGI

Bangalore, India

Software Engineer

April 2021 – May 2022

- Developed Flask microservices achieving sub-200ms API response times through database indexing and connection pooling, serving project data to 2,000+ active users.
- Delivered 10+ production-grade FastAPI and Node.js APIs, reducing forecast pipeline latency by 35% with secure authentication for scalable financial applications.
- Collaborated with cross-functional teams building a chatbot with TensorFlow, Dialogflow, and AWS Lambda, automating 70% of IT queries and saving 1,200+ support hours annually.

Atyati Technologies

Bangalore, India

Software Engineer

August 2019 – April 2021

- Created clustering models to segment banking customers by transaction behavior and demographics, exposing insights via Django APIs for 200K+ bank accounts.
- Built NLP workflows to process customer feedback sentiment, improving support categorization accuracy by 60%.
- Connected real-time ML scoring with Scikit-learn APIs, reducing loan risk assessment time by 45% and improving decision accuracy for banking teams.

ACADEMIC PROJECTS

Learning Nexus | *Python, CrewAI, RAG, Supabase, Google Cloud, FastAPI*

- Built multi-agent assistant that automated 90% of student queries and personalized learning using CrewAI and RAG.
- Integrated with Canvas and Supabase to track student progress and manage real-time responses for 500+ students.

EDUCATION

Florida Atlantic University

Boca Raton, FL

Master of Science in Computer Science

December 2024

Relevant Coursework: Machine Learning, Deep Learning, Generative AI, Conversational AI, Cloud Native Development

Visvesvaraya Technological University

Bangalore, India

Bachelor of Engineering in Computer Science

June 2019