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(Personal)
leetcode.com/u/Rajath_Rao/
(Personal)
github.com/rajathn8 (Portfolio)

Top Skills

Python (Programming Language)
Amazon Web Services (AWS)
Terraform

Certifications

AWS Certified Solutions Architect –
Associate
HashiCorp Certified: Terraform
Associate
Tableau
Natural Language Processing
Data Science Certificate

Rajath Rao

Senior Software Engineer | AWS & Python | FastAPI | AI & Cloud-
Native Applications | Ex-VP, Goldman Sachs | 7+ Years Designing
Scalable Systems
London Area, United Kingdom

Summary

Software Engineer with 7+ years of experience building scalable, production-grade microservices using Python, Django, and FastAPI. Proven track record in designing and deploying backend systems on AWS and on-premise infrastructure for large-scale financial and analytics platforms, leveraging cloud-native patterns, automation, and GenAI integrations.

At Goldman Sachs, I built and optimized high-performance Python microservices on AWS, implemented system migrations to Aurora Serverless v2, and engineered real-time monitoring solutions across hybrid environments - improving reliability, scalability, and cost efficiency for mission-critical systems.

Beyond traditional backend engineering, I'm passionate about leveraging GenAI and automation to enhance developer productivity and system intelligence. I focus on building reliable, maintainable, and elegant systems that power business-critical and AI-driven applications through clean architecture and data-driven design.

Core Skills: Python · FastAPI · Django · AWS · Docker · Kubernetes · PostgreSQL · Microservices Architecture · Cloud-Native Systems · GenAI Integration · System Monitoring & Automation

Experience

Intropic
Software Engineer
August 2025 - Present (6 months)
London Area, United Kingdom

- Building and scaling FastAPI-based microservices on AWS to power Intropic's AI-driven financial analytics platform.

- Integrating Generative AI capabilities into backend workflows using prompt engineering, LLM orchestration, and cloud-native automation.
- Working closely with data and research teams to design high-performance, production-ready systems for AI-assisted decision-making and data intelligence.

Skills: Python · FastAPI · AWS · Cloud Computing · Generative AI · Prompt Engineering · Software Infrastructure · Backend Engineering · Systems Design

Goldman Sachs

Software Engineer - Vice President

June 2022 - August 2025 (3 years 3 months)

United Kingdom

- Built and deployed highly scalable Python microservices on AWS using FastAPI and PostgreSQL, optimized for performance, reliability, and seamless cloud integration.
- Developed and managed on-prem infrastructure for mission-critical integration systems, ensuring stability and uptime.
- Upgraded systems to Python 3.11 and migrated RDS instances to Aurora Serverless v2, achieving improved performance, cost-efficiency, and scalable architecture for high-demand applications.
- Built and configured end-to-end monitoring tools for on-prem and AWS systems, enabling real-time insights, automated scaling, and improved system reliability.
- Engineered modular components to streamline infrastructure-as-code workflows and optimize database session handling for improved performance and maintainability.
- Refactored stable legacy systems to reduce technical debt, mitigate operational risks, and align with modern SDLC best practices.

Skills: Python · FastAPI · AWS · PostgreSQL · Docker · Terraform · Distributed Systems · Software Development · Cloud Infrastructure

Tech Mahindra

Senior Software Engineer

March 2021 - July 2022 (1 year 5 months)

India

- Collaborated with Infoblox in Tech Mahindra's Cyber Intelligence R&D team to develop next-generation network security solutions.

- Engineered FastAPI-based microservices for real-time monitoring of DNS server performance across enterprise networks.
- Implemented containerized monitoring pipelines using Docker and Kubernetes, ensuring high availability and scalable service operations.

Infoblox

Software Engineer

March 2021 - July 2022 (1 year 5 months)

India

- Collaborated with Infoblox in Tech Mahindra's Cyber Intelligence R&D to develop innovative network security solutions.
- Built FastAPI-based microservices to monitor and analyze DNS server performance across enterprise networks.
- Developed containerized monitoring pipelines using Docker and Kubernetes, ensuring continuous service availability and scalability.

NextOrbit

Software Engineer

November 2018 - March 2021 (2 years 5 months)

Bangalore

NextOrbit – Predictive Analytics Company | nextorbit.com/en

Software Engineer – Platform Engineering Team

- Implemented a custom reverse-index text similarity algorithm to power the company's search and recommendation systems.
- Developed data ingestion pipelines for a data lake architecture, enabling near real-time ingestion and retrieval of multi-gigabyte datasets.
- Contributed across the platform engineering lifecycle, including backend web development, testing, build automation, and release management.
- Built monitoring and orchestration pipelines using Docker, Docker Compose, and Kubernetes to ensure continuous service availability.
- Collaborated directly with clients to deliver business intelligence reports and visual analytics using Tableau.

IBM

Information Technology Analyst

December 2017 - October 2018 (11 months)

- Worked on Internal Email Automation Tool @ESM which Boosted the Nullified the Email Backlog Chain
- Performed Data Cleaning & Data Normalization

- Worked Extensively on Tableau and IBM Watson Analytics to derive comprehensive reports about IT Operational Data Like Incident Tickets, Service Request, Problem Requests, and Change Requests. Most Reports Assessed the KPI's of the Account like SLA, Staffing Plan, and Incident Management.
- Identifying Automation Opportunities

Education

Visvesvaraya Technological University

Bachelor of Engineering - BE, Engineering · (June 2013 - June 2017)