

Arun Mehra

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Professional Summary

Software Developer with **9+ years** of experience in **Python, Go, Cloud Computing, Identity & Access Management (IAM), IoT Solutions, and Cybersecurity**. Proven expertise in **developing scalable microservices** using **AWS, GCP, and Azure**. Skilled in **Test-Driven Development (TDD), Object-Oriented Design (OOD), API Development, and Data Analytics**. Adept at **Cloud SIEM, Threat Detection, and DevOps Automation** with a strong focus on **security, compliance, and cost optimization**.

Core Skills & Technologies

- **Programming:** Python, Go, C, Rust, Linux Scripting
 - **Databases:** MySQL, PostgreSQL, MongoDB, Cassandra, SQLite, AWS OpenSearch
 - **Frameworks & Libraries:** Flask, Django, FastAPI, Pytest, Streamlit, Scrapy, asyncio
 - **Cloud Platforms:** AWS (EC2, Lambda, CloudWatch), GCP, Azure
 - **DevOps & CI/CD:** Docker, Kubernetes, Jenkins, Terraform, Prometheus, Grafana, Kafka, ELK Stack
 - **Security & IAM:** OAuth2, OpenID, JWT, Role-Based Access Control (RBAC)
 - **Protocols:** REST, SOAP, MQTT, HTTP, IOT Matter Protocol
 - **Monitoring & Analytics:** AWS Kinesis, OpenTelemetry, Prometheus, SIEM
 - **Version Control & Agile Tools:** Git, Bitbucket, Jira, Confluence, Scrum
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Professional Experience

Lead Software Developer

Panasonic India Pvt. Ltd. | Oct 2021 - Jan 2025

- Led the development of **MirAle**, a **cloud-based IoT platform** for smart home automation, integrating the **Matter Protocol** for **cross-brand device interoperability**.
- Designed and deployed **microservices architecture** for **device and home management**, ensuring **99.9% uptime** and supporting **millions of users**.
- Developed **IAM solutions** for **multi-tenant security**, reducing **vulnerabilities by 60%**.
- Implemented **FOTA/LOTA** updates using **serverless architecture**, improving **update efficiency by 40%**.

- Led cross-functional teams to optimize **cloud security, performance, and scalability**, increasing system resilience by **25%**.

Software Engineer

FireEye Cyber Security | Oct 2020 - Oct 2021

- Designed **Cloud SIEM reporting tools** using **GraphQL, MongoDB, and Django**, reducing **incident response time by 30%**.
- Developed an **AWS Cloud cost optimization tool**, reducing expenses by **25%** through anomaly detection and automation.
- Collaborated with **DevOps and security teams** to align **cloud monitoring** with **compliance requirements**.

Software Developer

Sierra Circuits | Jun 2019 - Sep 2020

- Built a **KiCad plugin for PCB design validation**, enhancing design accuracy by **35%**.
- Automated **PCB manufacturing workflows** with **microservices**, reducing project timelines by **15 days**.
- Developed **Flask-based web applications** for **PCB analysis**, increasing efficiency by **50%**.
- Created **serverless APIs using AWS Lambda**, improving **scalability and reducing operational costs by 35%**.

Senior Technology Consultant

Aequm India Pvt. Ltd. | Jun 2016 - Jun 2019

- Designed **microservices** for **Retail POS systems**, enabling **real-time data synchronization**.
 - Developed **AI-based invoice extraction models** using **OpenCV and TensorFlow**, improving accuracy by **40%**.
 - Implemented **CI/CD pipelines** with **Jenkins and AWS CodePipeline**, reducing **deployment time by 30%**.
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Key Projects

MirAle IoT Platform

Technologies: Python, Go, Flask, Redis, MQTT, AWS, FastAPI

- Developed **IoT microservices** for **smart devices** (ACs, TVs) with **third-party SDKs**.
- Built **REST APIs** for **MQTT communication, kafka**, ensuring **99.9% reliability** in **real-time data exchange**.

- Implemented **user authentication, analytics, and device management** services.

Helix XDR (Cloud SIEM Solution)

Technologies: Python, Go, Celery, Django, Redis, PostgreSQL, AWS, Apache NiFi

- Developed **monitoring dashboards** with **Prometheus**, improving **system visibility by 70%**.
- Created **secure APIs for UEBA tools**, enhancing **threat detection accuracy by 45%**.

Sierra Companion App

Technologies: Python, KiCad, WxPython, Cassandra, AWS Lambda

- Developed a **desktop plugin for KiCad** enabling **real-time PCB design validation**, reducing design errors by **50%**.
- Built **serverless APIs using AWS Lambda**, enhancing **scalability and reducing operational costs by 35%**.

99POS System (Retail POS Solution)

Technologies: Python, Flask, SQLite, SOAP, FastAPI

- Developed **APIs for billing, inventory, and store management**, increasing efficiency by **40%**.
 - Integrated **third-party services via SOAP APIs**, improving **data exchange speed by 25%**.
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Education

PG Diploma in Embedded System Design

CDAC Bangalore | August 2015

B.E. in Electronics & Communication Engineering

Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal | June 2014