

SAI RAKSHITH

Senior Cloud Engineer

+91 8277169267 @sairakshith10@gmail.com <https://www.linkedin.com/in/sai-rakshith/>
sairakshith.com Bangalore



SUMMARY

AWS Certified Solutions Architect Professional with 3+ years of expertise in architecting and deploying **High-Availability (HA)** cloud infrastructure. Expert in **Infrastructure as Code (IaC)** using **AWS CDK**, **TypeScript**, and **Python** to automate complex environments and eliminate manual overhead. Proven track record of optimizing **CI/CD pipelines**, reducing **MTTR by 45%**, and maintaining **99.9%+ uptime** through **Serverless** innovation and **Event-Driven Architectures**. Currently pursuing a **Master of Technology in AI/ML from BITS Pilani**, leveraging **LLMs** to drive **Operational Excellence** and enhance engineering workflows. Specialized in **Cloud Security**, **Cost Optimization**, and **Multi-Account Governance** within **Agile** environments.

EXPERIENCE

Senior Cloud Engineer

App Mastery

12/2023 - Present

- Architected and delivered** fully automated **CI/CD workflows** using **AWS CDK (TypeScript)** and **CodePipeline**, reducing manual deployments by **95%** and increasing release velocity by **40%**.
- Led technical code reviews** for cross-functional teams, overseeing **Merge Requests (MRs)** to ensure code quality, adherence to **AWS best practices**, and the implementation of **security hardening** principles.
- Established enterprise-grade security** by integrating **AWS WAF**, **GuardDuty**, and **Security Hub**, achieving zero major security incidents while maintaining alignment with **OWASP Top 10** standards.
- Implemented multi-account governance** using **AWS Control Tower** and **Organizations**, enabling secure landing zones and standardized **Service Control Policies (SCPs)** at scale.
- Designed high-availability architectures** using **Amazon Aurora Global Databases** and **Multi-AZ clusters**, supporting 10,000+ concurrent users with optimized failover and **99.9%+ uptime**.
- Led AI-Engineering by using LLMs (ChatGPT/Gemini) in workflows, cutting debugging time and boosting prototyping.

Cloud Engineer

App Mastery

10/2022 - 12/2023

- Optimized cloud observability** by integrating **AWS X-Ray** and **CloudWatch Logs Insights**, reducing **Mean-Time-To-Resolution (MTTR)** by **45%**.
- Engineered scalable serverless functions** using **AWS Lambda (Python/Node.js)**, reducing operational overhead by **70%** and infrastructure costs by **50%** compared to traditional EC2-based deployments.
- Enhanced resource monitoring** via **AWS Synthetics Canaries** and **EventBridge**, achieving **99.9%+ API uptime** and reducing incident detection time by **50%**.
- Drove cost-efficiency** through tag-based allocation and **AWS Budgets**, delivering year-over-year cloud spend reduction via resource rightsizing and **Lambda Power Tuning**.
- Developed graph database solutions** using **Amazon Neptune**, leveraging **IaC (AWS CDK)** to reduce deployment time by **50%** while ensuring high-performance, real-time relationship querying.

Software Engineering Intern

Ingersoll Rand

2022

- Increased system efficiency by 15%** with automation apps using B&R Automation Studio.
- Architected and updated application modules** with Senior Developers. Adhered to design specifications and OOAD principles.
- Executed software versioning and alterations**, translating complex technical requirements into functional code while maintaining high standards for code quality and system reliability.

SKILLS

Amazon Web Services (AWS)

Cloud Native Design Serverless

Distributed Systems High Availability

Disaster Recovery

Infrastructure as Code (IaC) TypeScript

Python OWASP Top 10 CI/CD

CodePipeline GitHub Actions Git

AWS Control Tower AWS Organizations

E2E Tracing

Web Application Firewall (WAF)

Event-Driven Architecture

Operational Excellence

Cost Optimization System Design

AI Assisted Development

AI Driven Troubleshooting SQL

Cloud Security and Compliance

Object-Oriented Analysis and Design (OOAD)

CERTIFICATIONS

AWS Solutions Architect – Professional

Earners of this certification have an extensive understanding of designing technical strategies to accomplish specific business goals.

AWS Solutions Architect – Associate

AWS Developer – Associate

BLOGS AND PUBLICATIONS

Implementing OIDC bridge between GitHub and AWS using AWS CDK (Typescript)

Medium

Sai Rakshith

04/2025 [Link to Medium Blog](#)

Architected a secure **OIDC Identity Bridge** between **GitHub Actions** and **AWS** using **CDK**, eliminating long-lived keys through **secret-less authentication**.

EDUCATION

Master of Technology (Artificial Intelligence & Machine Learning)

[Birla Institute of Technology and Science, Pilani](#)

📅 2025 - 2027

Bachelor of Technology (Computer Science)

[Amrita Vishwa Vidyapeetham](#)

📅 2018 - 2022

PROJECTS

ECR Vulnerability Management & Alerting

📅 11/2025

🔗 <https://github.com/concept-coding-geeks/ecr-scan-notifications>

- **Architected an event-driven security pipeline** using **AWS CDK** and **Amazon EventBridge** to automate the detection and reporting of container image vulnerabilities in real-time.
 - **Developed a serverless Lambda Function** utilizing the **AWS SDK v3** to parse **Amazon Inspector** findings, providing engineering teams with actionable remediation steps and CVE identifiers.
 - **Implemented an alerting system** via **Amazon SNS** with custom-formatted payloads, categorizing security threats by severity (Critical, High, Medium) for rapid incident response.
 - **Enforced least-privilege security** by designing custom **IAM roles and policies**, ensuring secure inter-service communication between **AWS Lambda**, **SNS**, and **CloudWatch Logs**.
 - **Improved container security posture** by integrating **AES-256 encryption** at the repository level and enabling **AWS X-Ray active tracing** for end-to-end observability of the notification flow.
-

Multi-Environment Budget Governance

📅 09/2025

🔗 <https://github.com/concept-coding-geeks/github-actions-roles-stack>

- **Saved 15% in deployment costs** by automating multi-layer guardrails using AWS CDK across regions.
- **Architected a tiered notification system** that triggers real-time alerts at **50%, 75%, and 90%** of monthly budget consumption to prevent unexpected cloud spend.
- **Engineered dynamic resource naming** and prop-drilling logic to ensure unique, traceable resource identification for complex enterprise accounts.
- **Improved cost transparency** and accountability by establishing proactive **FinOps guardrails**, enabling teams to maintain operational excellence within predefined budgetary limits.
- Managed subscriber scalability for visibility in resource use with automated email alerts.

TRAINING / COURSES

AWS Generative AI Developer Professional (Udemy)

Currently deepening expertise in building and deploying production-ready AI solutions using AWS Services like Bedrock.

AWS Security Specialty (Udemy)

Currently deepening expertise in advanced **Cloud Security** architectures.

Python Programming (Udemy)