# SIDDHARTH RAMACHANDRAN

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### SUMMARY

MS Computer Science candidate with 2+ years building secure, cloud-native applications specializing in Identity & Access Management (IAM), authentication workflows. Proven expertise in Java, JavaScript/React, Python, and database management with hands-on AWS deployment experience. Strong track record of cross-functional collaboration and delivering scalable solutions.

#### **EDUCATION**

Northeastern University M.S Computer Science	September 2024 - Present	3.7/4.0
Anna University	4	2.7/4.0
B.E Computer Science	August 2018- July 2022	3.7/4.0

# **TECHNICAL SKILLS**

Languages: Java (Spring), JavaScript, Python (FastAPI/Flask), TypeScript, HTML/CSS

Frontend: React.js, Angular basics, Responsive UI Design, Webpack

**Backend & Cloud:** REST APIs, AWS (EC2, S3, RDS, CloudWatch, IAM), Docker, Microservices **Database:** SQL (PostgreSQL/MySQL), NoSQL (MongoDB), Database Design & Optimization

DevOps & Testing: Git, GitHub Actions, Unit Testing (JUnit), Integration Testing, CI/CD, Code Reviews

Security & Compliance: OAuth 2.0, SSO, FIPS Encryption, Identity Access Management (IAM)

## **WORK EXPERIENCE**

#### **Alphion Corporation**

Software Engineer

December 2023 - July 2024

- Built and deployed secure microservices on AWS cloud environments with proper IAM roles and policies
- Designed RESTful APIs with authentication/authorization layers for 1,000+ device management
- Implemented comprehensive unit and integration tests achieving 85% code coverage
- Containerized services using Docker and established CI/CD pipelines with automated security scanning
- Integrated Google Maps API with responsive JavaScript frontend, improving field operations by 15%

# **Zoho Corporation**

Member Technical Staff

August 2022 - July 2023

- Designed and implemented secure authentication workflows (OAuth 2.0, SSO) and user provisioning systems, reducing unauthorized access by 30% directly aligning with identity and access management best practices
- Built FIPS-compliant encryption modules meeting cybersecurity compliance standards for 5K+ lines of code
- Developed analytics dashboards using Java/PostgreSQL for real-time compliance reporting and user access monitoring
- Collaborated with cross-functional security and product teams to manage dependencies and deliver IAM solutions
- Participated in design and code reviews, ensuring security best practices across authentication modules

Project Trainee

October 2021 – May 2022

- Improved API performance by 25% using Jersey (Java), boosting system scalability.
- Enhanced observability via advanced logging/monitoring, reducing debug time by 30%.
- Used JProfiler to identify bottlenecks, improving service throughput by 15%.

## **PROJECTS**

## SettleMint / FastAPI, TypeScript, MySQL

- Developed secure user authentication and authorization system with role-based access control
- Built responsive UI using React, HTML/CSS, and JavaScript for real-time group expense tracking
- Designed database schema with user provisioning workflows and secure session management
- Implemented comprehensive unit tests and integration tests for authentication flows

## Image Enhancement and Manipulation Tool / Java, SwingUI, MVC Pattern

- Developed application with secure user access controls and data validation
- Wrote 60+ unit and integration tests achieving 92% code coverage using TDD methodology
- Applied design patterns (Builder, Command) ensuring maintainable and scalable architecture

#### **CERTIFICATIONS & LEARNING**

- Currently preparing for AWS Certified Solutions Architect
- Completed coursework in Cloud Security and Identity Management