

Arun Sakthi Anand M

+91-9843965600 | arunsakthianand@gmail.com | LinkedIn | GitHub | Website

EXECUTIVE SUMMARY

Backend-heavy full-stack engineer with experience in system architecture and distributed systems. Skilled in designing scalable, reliable backend services using Java, Spring Boot, messaging systems, and cloud-native patterns, complemented by frontend development capability in Angular for end-to-end solution delivery.

EDUCATION

Bachelor of Technology in Electrical Engineering

Indian Institute of Technology - Hyderabad

Hyderabad, India

Aug. 2019 - May. 2023

- Elected President, led IIT Hyderabad's post-COVID reopening and major student/alumni initiatives.

EXPERIENCE

Lead Engineer (Full-Stack), Air India

June 2024 - Present

- Modernized a mission-critical Spring Boot platform by upgrading from **Java 8 to 21** and **Spring 2 to 3**, reducing p99 latency by around 40% and garbage collection pauses by 95% in production workloads.
- Built a high throughput push notification microservice using asynchronous pipelines with FCM and APNs, replacing external vendors and achieving **60% infra cost savings** while maintaining high reliability and scalability.
- Led a team of four to redesign Air India's notification system into a decoupled Azure Service Bus-based architecture with multiple priority topics and dead-letter queues, **improving throughput from 30 to 75 TPS**.
- Re-architected the backend and datastore of the Preference Management System by replacing Couchbase with MongoDB and Redis, **reducing infrastructure costs from 1.6L to 85K**, and built an Angular interface enabling users to update preferences through a streamlined UI.
- Developed a **Notification Dashboard** using Angular, with secure RBAC and reducing campaign launch cycles from hours to minutes by eliminating direct database operations and enabling self-service workflows.

Software Development Engineer Trainee, Air India

June 2023 - May 2024

- Received **High Flyer Award** for contributions in migrating core backend services during the **Air India-Vistara integration**, scaling systems to multi-terabyte datasets and ensuring consistency, zero-downtime rollouts, and reliability across distributed microservices.
- Enhanced the airline search experience by developing UI components (StencilJS + Angular) and leading the upgrade from **Angular 13 to 18**, improving stability, performance, and maintainability.
- Developed a serverless Web Performance Monitoring platform using Node.js (v16+), TypeScript, Azure Functions, PostgreSQL, and Playwright automation to track Core Web Vitals and deliver real-time performance analytics and competitive benchmarking for Air India's digital transformation.

PROJECTS

Interview Organizer (Live Demo) | Spring Boot • Angular • MongoDB • AWS

November 2025

- Designed a scalable cloud architecture using AWS Elastic Beanstalk, S3, CloudFront, and MongoDB Atlas, achieving 99.9% uptime, global low-latency access, and automated environment scaling.
- Implemented secure authentication with JWT (access/refresh), Spring Security, and Angular interceptors, and optimized frontend performance using signals, OnPush change detection, and lazy loading for faster load times.
- Implemented CI/CD with GitHub Actions using parallel jobs, environment-specific pipelines, artifact caching, and automated CloudFront invalidation.

TECHNICAL SKILLS

Backend: Java, Spring Boot, Spring Security, REST APIs, Microservices, Node.js

Frontend: Angular, TypeScript

Datastores/Messaging: PostgreSQL, MongoDB, Redis, Kafka, Azure Service Bus, Event Hub, AWS SQS

DevOps: Docker, Kubernetes, AWS (EC2, S3, Elastic Beanstalk, CloudFront), Azure (AKS), GitHub Actions

ACHIEVEMENTS

JEE Mains AIR 737; JEE Advanced AIR 1255; KVPY Scholar (AIR 144); NTSE Scholar