SAI RITHWIK M

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EDUCATION

Integrated M. Tech | *Computer Science and Engineering*   August 2018 – July 2023
International Institute of Information Technology, Bangalore   Bengaluru, India

EXPERIENCE

Software Development Engineer - 2 | *Navi*   July 2023 – Present
- Working with Debt Management Platforms and Calling Teams to build systems for debt recovery operations.
- Building a prioritization platform that takes various signals to recommend the best cases for debt recovery agents.
- Developed experimentation and A/B testing platforms to facilitate testing strategies.
- Developed internal tools and maintained a CRM which helps collection agents improve their performance and productivity.

Software Engineer Intern | *Pegasystems*   January 2023 – June 2023
- Worked with the Search and Reporting team to develop and maintain search services for Pega's products.
- Led migration of Elasticsearch indices from single-tenant to multi-tenant architecture using Snapshot and Restore method, resulting in **$20M** AWS cost savings with minimal downtime.
- Improved test coverage for Indexer and Search services using pact contracts and enhanced New Relic alerts.

PROJECTS

Experimentation Platform | *Java, Spring Boot, PostgreSQL*   October 2024 – Present
- Designed and built a centralized A/B testing platform for running controlled experiments on targeted cohorts.
- Developed segmentation engine, orchestration engine, and real-time rollback capabilities supporting both scheduled and client-side experiments.
- Architected APIs for experiment management, variant assignment, and analytics with support for multiple concurrent experiments and configurable rollout percentages.

Optimal Agent-Case Allocation System | *Kotlin, Spring Boot, Databricks*   March 2024 – Present
- Designed and developed an end-to-end allocation system for optimal distribution of cases to recovery agents based on their languages, their EMI caseload constraints and many other factors.
- Orchestrated Linear Programming (LPP) models to optimize agent assignments considering caseload levels, agent specializations, geographical constraints, and performance metrics.
- Owned this business-critical feature that streamlines debt recovery operations and recovers over **Rs. 100 crores per month** through improved allocation efficiency.

Debt Recovery Prioritization Platform | *Elasticsearch, Kotlin, Spring Boot*   September 2024 – Present
- Building an intelligent prioritization platform that analyzes multiple signals including customer behavior, payment history, and risk scores to recommend optimal cases for debt recovery agents.
- This would go on to optimise a lot of agent workloads, and governance within the systems.

Global Search Engine | *Elasticsearch, Java, Spring Boot*   January 2024 – March 2024
- Built a global search platform enabling agents to search cases by names, case information with **100 ms** latency.
- Implemented fuzzy search with optimal data structures, shard routing for data consistency, and migration strategies for schema changes.
- Improved agent productivity by reducing search operations from **3 clicks to 1 click**

SKILLS

Programming Languages: Java, Kotlin, Python
Tools: Elasticsearch, Postgres, DynamoDB
Languages: English (C1), Hindi (C1), Telugu (Native), Tamil (B1)

COMMUNITY INVOLVEMENT

Co-Licensee, TEDxIIITBangalore   2020 – 2021
- Co-Licensee of TEDxIIITBangalore an annual event where speakers from various disciplines share ideas.
- Organised the first virtual edition of TEDxIIITBangalore which gained over **75k views** on Youtube.