Ankit Singh
Lead Engineer

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Remote ⚲

Self-driven full-stack developer specialized in Ruby on Rails, Python, MySQL, and AWS. Passionate about crafting clean, maintainable code, communicating clearly and independently driving technical projects from inception to completion. Proven leadership in managing agile teams, driving engineering strategy.

PROFESSIONAL EXPERIENCE

Lead Engineer
LotusPay(acquired by Juspay)
📅 Feb 2020 – June 2024

Project Name: Developing India's best NACH System.

Independently established and managed the agile framework, documented processes, and managed technical decisions independently. I engineered the cutting-edge tech stack to align it seamlessly with the organization's strategic objectives and achieved the result with improved overall efficiency.

Front End Development

- Independently designed intuitive payment dashboards using Ruby on Rails, simplifying user interactions for CRUD payment operations and significantly improved overall user efficiency.

- Developed **targeted payment tracking popups**, improving user clarity and **reducing** payment drop-offs by **90% through** enhanced visibility into **transaction statuses**.

- Optimized **AJAX requests** through strategic HTTP protocol implementation, drastically **reducing page load time** from **7 to 1** seconds, delivering a smoother, frustration-free user experience.

Back End Development

- Engineered robust, scalable **REST APIs** using **RoR, Redis, and AWS EC2**, **improving** system payment interactions by **90%** and freeing core servers for critical operations.

- Implemented detailed, user-friendly error handling across REST API endpoints, with **clear messaging and logging via AWS CloudWatch**, **reducing customer confusion** and **increasing satisfaction by 25%**.

- Redesigned **A/B testing** strategy using custom logic and **CloudWatch** metrics to track **web engagement patterns**, resulting in a **30% increase in conversion rates** by optimizing user flows based on data-informed UI decisions.

- Built a real-time **performance monitoring and alerting system** using **AWS CloudWatch, SNS, and Lambda**, achieving a **95% reduction in downtime** and maintaining an average **incident resolution time under 5 minutes**.

- Led the design of a **scalable image-processing pipeline** on **AWS EC2**, **reducing image processing time to 3 seconds** and boosting operations team **productivity by 150%.**

- Engineered an optimised **payment data ingestion pipeline** using **AWS RDS (MySQL), batch imports, and indexing strategies**, resulting in a **15x reduction in server processing time** for bank auto-payment syncs.

Cloud/DevOps

- Designed and implemented a **high-performance MySQL schema** for the core application stack, **optimising data** storage and complex query execution—**enhancing** overall product responsiveness and **scalability across AWS RDS**.

- **Diagnosed performance bottlenecks** using profiling tools (e.g., New Relic, EXPLAIN), implementing intelligent caching with **Redis and CDN layers**—**cutting server load** by **50%** and **saving** over $10k annually in hosting costs.

- Leveraged **AWS Route 53, S3, and CloudFront** to implement **blue-green deployments, enabling zero-downtime** rollouts and **reducing** release-related disruptions by **30%** during high-traffic hours.

Senior Software Engineer
Sequoia
📅 July 2024 – Till Now

Project Name: Developing GenAI agent chat bot

- Deployed a production-grade conversational AI agent leveraging an open-source(Dify) with RAG engine.

- Optimized prompt engineering techniques using Dify's Prompt IDE. Improving in the relevancy and precision of model outputs.

- Built end-to-end infrastructure for LLM inference, optimizing vector database queries and indexing strategies, achieving significant reductions in AI response latency.

- Utilized Dify's visual orchestration tools to design complex AI workflows, reducing time-to-deployment.

SKILLS

- Ruby on Rails, Python, JavaScript
- ReactJS, Flask, Shell Scripting, Rest API's
- MySQL, DynamoDB, PostgreSQL
- Redis, Sidekiq, Git, GitHub, OpenAI API's
- Amazon Web Services, Dockers, AppSignal

TECH LEADERSHIP HIGHLIGHT

- Independently managed technical strategy, documentation, and agile processes across full project lifecycle.

- Delivered strategic alignment between engineering design and business goals.

- Published manuscript on **Object Detection and Segmentation** in International Scientific Research.

EDUCATION

B TECH, Computer Science (June 2016 – June 2020)
Cambridge Institute of Technology - India