

Aditya Chandra

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SUMMARY

Software Engineer with **3+ years** at GE Transportation, building **large-scale SaaS platforms** in Java/Spring Boot. Designed fault-tolerant systems for managing full contract lifecycles, powering **\$1M+ in daily revenue** and pricing automation for Fortune 500 railroad clients.

EDUCATION

University of Colorado Boulder, *Master of Science, Computer Science* - GPA: 3.94/4.0

Boulder, USA

Teaching Assistant; Coursework: Distributed Systems, Big Data Architecture, Deep Learning, NLP, Data Mining

December 2024

Ramaiah Institute of Technology, *Bachelor of Engineering, Information Science* - GPA: 4.0/4.0

Bangalore, India

Google Developer Student Club Facilitator; Coursework: Data Structures, Algorithms, Design Patterns, OOP, ML

June 2019

TECHNICAL SKILLS

Programming Languages & Cloud: Java, Python, SQL, JavaScript, TypeScript, Go, C++; AWS (EC2, S3, Lambda), GCP

Databases & Frameworks: PostgreSQL, Oracle, MongoDB, Redis, DynamoDB, Elasticsearch; Spring Boot, Flask, Node.js, React, Redux, GraphQL, Kafka, JUnit, PyTorch, Lightning, Hugging Face, Sagemaker, LLMs (BERT, LLaMA-3), PySpark, Glue

Tools & DevOps: Git, Maven, Gradle, Docker, Kubernetes, Terraform, GitHub Actions, CI/CD, Grafana, Kibana, JMeter, Swagger, Figma

WORK EXPERIENCE

Virufy

Sunnyvale, USA

Machine Learning Engineer, (virufy.org)

February 2025 - Present

- Engineered scalable serverless ML pipeline on AWS (Lambda, Glue, S3), **preprocessing 10k+ audio samples** for feature extraction.
- Designed a real-time feature store with DynamoDB enabling **sub-1ms fetch** for COVID detection model training and inference.

GE Transportation, a Wabtec Company

Bangalore, India

Software Engineer, Team - [Railconnect Contract Management](#)

July 2019 - July 2022

- Won **2021 Q1 Pursuing Excellence Award** for leading end-to-end development of contract lifecycle management features in [RailConnect](#) platform, enabling **first-to-market** capabilities for Fortune 500 railroad companies.
- Architected a proof-of-concept modernization of legacy monolith into **5 domain-driven microservices** using Spring Boot and PostgreSQL, demonstrating **30% performance improvement** and securing approval for platform-wide implementation.
- Optimized Elasticsearch query performance by implementing custom analyzers and reducing wildcard searches, achieving sub-second contract lookups and **40% faster aggregation across 1000+ daily transactions**.
- Developed **20+ RESTful APIs** using Spring MVC and JPA repositories for contract lifecycle management, integrating with third-party approval systems through custom endpoints and **handled asynchronous status updates**.
- Spearheaded innovative ML price prediction solution using Random Forest regression on **100,000+ historical data points**, **cutting annual rebate costs by \$300,000**; won company-wide hackathon among 100+ teams.

GE Transportation, a Wabtec Company

Bangalore, India

Software Engineer Intern, Team - [Transportation Management Service](#)

February 2019 - July 2019

- Automated customer onboarding process through PL/SQL scripts, **achieving 90-second setup time** and 70% faster support resolution.
- Built **5+ reactive REST APIs** with Spring WebFlux to stream real-time railcar data, enabling efficient filtering and pagination.
- Optimized React/Redux dashboard with lazy loading, pagination, and virtualized lists for real-time railcar data visualization.
- Implemented **multi-stage Docker deployments with Kubernetes**, enabling seamless scaling across five production environments.

PROJECTS

[Hyperparameter Tuning as a Service](#) | React, Kafka, Docker, Kubernetes, PyTorch

December 2023

- Architected distributed ML platform **reducing model training time from hours to minutes** through parallel grid search.
- Built fault-tolerant hyperparameter optimization system using Kafka and Kubernetes, implementing automatic job recovery and async training updates for **50+ Hugging Face models** across healthcare and finance domains.

[Arxiv Insanity](#) | React, Go, MongoDB, Neo4j, Redis, Docker, Kubernetes, Terraform

May 2023

- Engineered a research paper discovery tool using **Neo4j Cypher queries** to model citation relationships **across 10,000+ papers**.
- Developed responsive [frontend](#) using React, featuring interactive citation network visualizations with year-based and citation-count filters, helping researchers seamlessly explore and organize papers, ultimately **reducing literature review process from days to hours**.

PUBLICATIONS

- “[Media Framing through the Lens of Event-Centric Narratives](#)” - 6th Workshop on Narrative Understanding, EMNLP 2024
- “[Study on Unsupervised Statistical Machine Translation for Backtranslation](#)” - Recent Advances in NLP 2019

AWARDS & CERTIFICATIONS

- [AWS Certified AI Practitioner](#)**
- 3rd Place** - AWS Hackathon, University of Colorado Boulder CS Department

March 2025

February 2024