Aditya Chandra

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EDUCATION

University of Colorado Boulder — **Boulder, USA**
Master of Science in Computer Science - GPA: 3.94/4.0 — *December 2024*
Ramaiah Institute of Technology — **Bangalore, India**
Bachelor of Engineering in Information Science - GPA: 4.0/4.0 — *June 2019*

TECHNICAL SKILLS

Programming Languages: Java, Python, SQL, JavaScript, C++, Go
Cloud & DevOps: AWS (EC2, S3, Lambda, RDS), GCP, Docker, Kubernetes, Terraform, GitHub Actions
Frameworks & Libraries: Spring Boot, PyTorch, Flask, Kafka, Node.js, React, Next.js, Tailwind CSS
Databases: PostgreSQL**,** Oracle, MongoDB, Redis, DynamoDB, Elasticsearch
Tools: Git, VS Code, Eclipse, Postman, Jira, Oracle SQL Developer

WORK EXPERIENCE

GE Transportation, a Wabtec Company — **Bangalore, India**
Software Engineer — *August 2019 - July 2022*

- Spearheaded the modernization of a legacy application by decoupling the monolith into 5 microservices, enhancing maintainability and **boosting performance by 30%**.
- Fortified application security by implementing TLS encryption for Oracle and MongoDB and eliminating 30+ OWASP vulnerabilities, **cutting data breach risks by 40%**.
- Optimized the ETL data pipeline by refining Elasticsearch queries, reducing wildcard searches, and removing redundant aggregations, **improving aggregation speed by 20%**.
- Led end-to-end feature development as primary contributor, revamping database schema, UI, and backend to achieve a **15% performance boost**, earning the *2021 Q1 Pursuing Excellence Award*.
- Collaborated with cross-functional teams across time zones to implement SSO-based access to our application suite, enhancing security and streamlining access for over **500 users across 10 organizations**.

GE Transportation, a Wabtec Company — **Bangalore, India**
Software Engineer Intern — *February 2019 - July 2019*

- **Accelerated dashboard performance by 33%** by migrating to Reactive Microservices architecture, reducing latency and enabling real-time processing of high-volume data streams.
- **Reduced database bloat by 25%** with a scheduled cleanup script for deduplication and added data integrity checks for future updates, resulting in **15% improvement** in QA efficiency and faster testing cycles.
- **Boosted team productivity by 40%** by configuring Docker with soft volumes on Windows, resolving persistent mounting issues, and **eliminating frequent development downtimes**.

PROJECTS

Hyperparameter Tuning as a Service | React, Kafka, Docker, Kubernetes, PyTorch | Link — *December 2023*

- Developed a cloud-based application for automated hyperparameter tuning, streamlining model development to support Hugging Face datasets and pre-trained models, **boosting scalability and efficiency**.
- **Reduced training time by 32%** through parallel grid search, **enabling faster model selection** and facilitating rapid experimentation across domains like healthcare, finance, and education.

Arxiv Insanity | React, Go, MongoDB, Neo4j, Redis, Docker, Kubernetes, Terraform | Link — *May 2023*

- Developed a scalable cloud-based application to **streamline literature review**, enabling effortless exploration of related academic papers.
- Automated citation extraction using the semantic scholar API and **visualized intricate paper connections**, enabling more efficient and intuitive research exploration.

ACHIEVEMENTS

- **Certified - AWS Developer Associate (DVA-C02)** — Expected: *November 2024*
- **Co-authored –** "Media Framing through the Lens of Event-Centric Narratives", accepted to the 6th Workshop on Narrative Understanding, co-located with EMNLP 2024 — *October 2024*
- **3rd Place** - AWS Hackathon, University of Colorado Boulder CS Department — *February 2024*
- **1st Place -** Network and Logistics Virtual Hackathon, Wabtec Corporation — *November 2021*
- **Co-authored** - "Study on Unsupervised Statistical Machine Translation for Backtranslation" published in "Recent Advances in Natural Language Processing" — *September 2019*