

Aditya Goel

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Education

Indian Institute of Information Technology

Allahabad, UP, India

B.TECH + M.TECH (DUAL DEGREE)

June, 2016 - Jul, 2021

- CGPA : **9.02**
- Bachelors and Masters in Information Technology

Work Experience

BlinkIt

Remote

SOFTWARE DEVELOPER | SUPPLY CHAIN ENGINEERING

Aug 2021 - Present

- As a **product engineer**, I take **end-to-end ownership** of small and medium features, notably **BlinkIt-Hyperpure (Zomato)** EDI System, **Inventory Audit** Workflow, **Task Auto-Assignment Logic**
- **Independently developed** a **resource allocation engine** for warehouses workforce automation that saved **75 lakhs per month** in employee cost and **eliminated 60 hours+** of managerial overhead per day
- **Successfully** migrated entire **inventory pricing** to a new service in a different language, empowering new pricing pipelines and saved several weeks of addition development effort
- Optimised 10+ nightly jobs to decrease execution time from **few hours to less than 5 minutes**
- Contributed in **cross-team projects** in building **Multi-Replenishment System**. Shortened the **New Product On-boarding** and **Offer Creation** Systems from **2 weeks to 3 days**
- Reworked the **GST computation logic** to accommodate for new product categories and tax changes
- Implemented **fail-safe layer** for communication between **Celery and SQS**. Set up CRON jobs to ensure that 100% messages are processed despite any initial failure(s).
- Contributed towards the legal restructuring of **Grofers to BlinkIt**, worked on invoice sequencing logic and multi-vendor support
- Responsible for **Design** (Correctness and Scalability), **Implementation**, Setting up **Monitoring and Alerting** (Grafana Dashboards, Sentry, Opsgenie), **Debug Toolkit** (APIs, queries, RCA tools), **Performance**, and **Production Support**
- **Tech Stack**: Golang, Python, Java, MySQL

Amazon

Bangalore | Remote

SOFTWARE ENGINEERING INTERN

Jan 2021 - July 2021

- **Implemented** the design for the **service migration** of Amazon Pay on **Amazon.com/Your-Orders** Page.
- Wrote SJCL contracts (Internal Java Library) to correctly **navigate complex business conditions** and show the intended data on the page.
- Suggested **design changes to improve performance**, participated in **design reviews**, set up new repositories in Amazon Pay, and wrote **detailed documentation** for its usage.
- **Collaborated with overseas sister teams** for code reviews, deployments and contributed to their code base to enable Amazon Pay functionality.
- **Successfully migrated 100% traffic** to the new endpoint for all devices (mobiles, tablets, and PCs), impacting all customers in North America region.
- **Tech Stack**: Horizonte (Java Spring Boot), PHP

Notable Projects

Inventory Routing Problem With Time Window Optimization

Remote

GRADUATE RESEARCH ASSISTANT | UNIVERSITY OF CHICAGO

July 2020 - Jan 2021

- Tasked with reducing the overall cost delivery fleet for replenishing retail stores when the weekly demand is known.
- Strict time windows at stores, variable heterogeneous fleet, and unknown intermediate stops were amongst the major constraints.
- **Integrated Google Maps API** to accurately calculate routes and cost.
- **Developed a Python Library** which computes routes via **multiple heuristics** and provide insights for each solution.
- Successfully defended the research as a part of Masters' Degree.
- **Tech Stack**: Python, Gurobi Optimizers (Mixed Integer Linear Programming)

Mixture of Manifold Experts: Large Scale Classification for Genomics

RELIANCE INDUSTRIES | JIO AI CENTRE OF EXCELLENCE

Hyderabad, Remote

Dec 2019 - June 2020

- Built complex mathematical formulations to create affinity networks of data points.
- Optimised code to run computation for extremely large (genomics) dataset.
- Integrated the entire process with workflow management tools to schedule jobs.
- Performance extensive research and experimentation throughout the project.
- Received several accolades and follow-on internship offers
- *Tech Stack*: Python, Scala, Microsoft Azure

Publications

IEEE

- P. Shukla, B. Bhandari, **A. Goel**, et al, "**Fusing Multimodal Human-Robot Communication using Deep Learning**", 2019 International Conference on Electrical, Electronics and Computer Engineering (UPCON), ALIGARH, India, 2019, pp. 1-6, doi: 10.1109/UPCON47278.2019.8980213.

Certifications

Amazon Web Services

- AWS Certified Cloud Practitioner