

TANISHQ AGARWAL

IIT KHARAGPUR

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EDUCATION

Degree	Institute / Board	Year	CGPA / %
Dual Degree, Civil Engg	IIT Kharagpur	2019 – 2024	8.0
CBSE	Lal Bahadur Shastri Srn. Sec. School	March, 2019	92.8 %
ICSE	Don Bosco School Liluah	March, 2017	91.8 %

EXPERIENCE

Urban Company May 2024 – Present

Software Developer (Backend Development) | *TypeScript, Kafka, Airflow, MongoDB, SQL, Kibana, Grafana, Microservices*

- Architected and developed a **lat/long-based intelligent matchmaking engine** to accurately pair customer requests with relevant service providers, capturing demand from **non-UC serviceable areas through a parallel fulfillment system**. The system scaled to handle approximately **3x the request volume of UC's core regions**, significantly expanding Urban Company's national reach. **Automated the complete fulfillment funnel on WhatsApp**, including job assignment, OTP verification, and reminders, leveraging **Sarvam.AI's voicebot** for customer communication and achieving a **20–25% reduction in Ops costs** via an automated onboarding pipeline
- Built a flow for enabling **automatic placement of subscription orders** based on provider inventory thresholds and calculated replenishment needs for each provider. This included developing a **pricing engine** to determine optimal pricing across multiple subscription types and payment modes. This streamlined provider order fulfillment and facilitated the adoption of **Domain Driven Design (DDD)** for scalable and maintainable systems
- Created a **vendor and vendor catalog construct from scratch** to enable the automation of the procurement lifecycle. This enabled **automating 80% of procurement orders (which accounts for approximately 850 SKUs)**, thereby increasing operational efficiency and significantly reducing manual overhead
- Engineered a **comprehensive product scanning system that captures real-time product usage** by UC partners at the time of request delivery. This system is integral to maintaining accurate **partner inventory records and tracking granular product usage scores**. The flow was designed to enable the systematic reconciliation of the entire product fulfillment and logistics flow across the supply chain, ensuring traceability from order to delivery

INTERNSHIPS

Standard Chartered

May 2023 – Jul 2023

- Received a **Pre-Placement Offer** for outstanding performance and valuable contributions during the internship period
- Implemented a **Python-based automation** script, collaborating closely with the **Vice President** of Project Management, to automate the manual fund allocation process within the **Financial Security Services** team in the Financial Markets
- Significantly eliminated monthly processing time of approximately **80 hours**, thereby enhancing operational efficiency and accuracy while enabling seamless collaboration among a closely-knit team of **6-7 stakeholders**

Niti.AI

Feb 2023 – Apr 2023

- Developed **RESTful API endpoints using Go** for the backend and integrated them with the frontend using **Next.js**
- Utilized **gRPC and Protobuf** to maintain consistent data structure between client and server, enhancing data integrity
- Designed **DB Schemas in PostgreSQL** for element libraries facilitating the efficient generation of JSON templates
- Created a UI using **React Flow**, allowing users to create custom flows by selecting cards and defining transitions

Evva Health

Sep 2023 – Nov 2023

- Built a secure **React.js** frontend featuring **JWT-based authentication**, ensuring data security with seamless user access
- Created mobile chatbot UI using **react-chatbot-kit**, integrating **OpenAI** services for dynamic interactions with the bot

PROJECTS

Rubik's Cube Solver

May 2022 – Jun 2022

- Modeled a virtual **Rubik's Cube(3x3)** in 3 different models/classes using standard data-structures present in C++
- Achieved a solving time of under **3 seconds** for a Rubik's Cube **jumbled 8 times**, using **BFS, DFS and IDDFS** algorithms
- Implemented the **Korf's IDA* Algorithm**, achieving a solving time of under **10 seconds** for a cube **jumbled 13 times**

Group Chat Application

Nov 2021 – Dec 2021

- Created a real-time texting-based web chat application that allows multiple users to create and join chat rooms
- Utilised **Express and Socket.IO** frameworks to support full-duplex communication between the client and server
- Designed the front-end using **HTML and CSS**, and successfully deployed the application using **Heroku CLI**

AWARDS and ACHIEVEMENTS

- Secured an **All India Rank of 43** in Facebook Hackercup Round 1 2022
- Secured a **Global Rank of 1101** in Google Kickstart Round D 2022
- Secured a rank under **Top 2.1%** among 1.2 Million applicants in JEE Mains 2019
- Secured a rank under **Top 2.7%** among 2.2 Lakh candidates in JEE Advanced 2019

SKILLS and EXPERTISE

Languages / OS : C, C++, Python, Go, TypeScript, LaTeX, Windows, Ubuntu

Libraries : C++ STL, Node.js, NumPy, Pandas, Matplotlib, OpenCV

Software : Postman, Matlab, Grafana, ELK stack, MS PowerPoint, MS Excel, Adobe Photoshop