Dhruv Mittal

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WORK EXPERIENCE

Analytics Engineer Intern-BMW Group, USA

May 2023-December 2023

- Reduced active licenses from 1.7M to 250k, saving \$200K by creating and maintaining data pipelines to track AAF license usage across systems using **Power BI**, **SQL**, and **Python** by identifying redundant accounts.
- Collaborated in Agile sprints, contributing to UI development, testing, deployment (Git), across a team of 7.
- Improve malicious activity detection by 40% by developing ETL pipeline & visualization board to monitor activity logs using **Python, SQL, AWS**, and **PowerBI**.
- Produced a comprehensive user documentation and provided ongoing support, resulting in a 30% reduction in helpdesk tickets while successfully onboarding over 200 new Bitwarden users.

Software Engineer – UNITASLOGISTIX PVT LTD, INDIA

January2022 - July 2022

- Engineered a real-time logistics web platform using **React**, **JavaScript** enabling clients to request real-time shipping quotes based on commodity, container size, route, and seasonality.
- Delivered modular and reusable UI components & a backend service integrating **Rest APIs** in **Node.js** via **Axios** for real-time shipping rate retrieval, validated via Postman and automated unit tests.
- Architected a responsive frontend UI using Tailwind CSS, and managed **MongoDB**-backed schema for tracking historical and real-time quote data, enabling advanced analytics and seasonal pricing insights.
- Enhanced operational efficiency by streamlining communication between logistics teams and clients, reducing manual coordination by **60%** and accelerating query response time by **3x**.

Software Engineer - REVMEUP, INDIA

January2021 - July 2021

- Developed a social review web platform using **React, Node.js, APIs,** and **MongoDB**, attracting 1,500+ users and handling 5,000+ product reviews.
- Restructured product search analytics by creating custom data structures resulting in 30% increase in search efficiency.
- Migrated database from Postgres to MongoDB, enhancing performance and increasing the platform efficiency by 30%.
- Integrated and tested **RESTful services** with Axios and handled asynchronous data fetching using JS promises and fetch APIs.

ACADEMIC PROJECTS

Subscription Management System - Link

April 2025

- Created a production grade backend system using Node.js, Express & MongoDB, implementing JWT authentication, server-side logic & Rest API design.
- Integrated automated backend workflows for subscription handling, email notification and payment processes.

Smart Email Assistant - Link

May 2025

- Built an AI Assistant using Java, Spring, and React, enabling AI generated replies integrated via a browser extension.
- Boosted email response efficiency by 60% through integration with Google Gemini for natural language understanding.

DocuChat AI - PDF Chat - Link

March 2025

- Engineered a Gen AI chat platform for pdf interactions using React, TypeScript, Pinecone, Langchain, OpenAI & Clerk.
- Developed multi-agent workflows and document loaders, deployed with Vercel & Stripe for seamless monetization.
- Applied retrieval-augmented generation (RAG) for context-aware answers with a 95% response accuracy.

CI/CD ML Deployment Pipeline - Link

February 2025

- Developed a predictive ML model with 91% accuracy through data cleaning and feature engineering using Python.
- Automated CI/CD pipeline using **GitHub Actions & Docker**, enabling scalable and efficient deployment on Heroku.

Smart City Real Time Data Streaming Pipeline - Link

January 2025

- Developed a real-time data streaming pipeline using Python, Kafka, and Spark, processing over 1,000 records/sec.
- Automated ingestion and transformation of data; stored results in AWS Redshift and visualized KPIs in Power BI.

WebRTC – Video Call App - Link

November 2024

- Built a real-time video calling app using **React**, **WebRTC** & **Socket.io** for peer-to-peer communication & low latency.
- Engineered backend using Node.is, deployed on AWS EC2 via Docker, ensuring high performance and scalability.

SKILLS

Programming Language: Python, C++, JavaScript, Java, SQL, TypeScript, HTML, CSS, Tailwind CSS

Frameworks: React, React Native, Next.js, Node.js, Express, Hadoop, Hive, Spark, Kafka, Spring, Flask, Django

Tools: Docker, API, AWS, Azure, Power BI, MongoDB, Tensorflow, Sklearn, Bitwarden, NPM, Git, Google Firebase

EDUCATION

Master of Science, Computer Science

August 2022 - December 2024

University of Texas at Dallas

Bachelor of Technology, Electronics and Communication Engineering

July 2018 - June 2022

Indian Institute of Information Technology (IIIT)