

TARUN AJITKUMAR

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EDUCATION

Virginia Tech

Master of Engineering – Computer Science and Applications
Cumulative GPA: 3.90/4.00

Aug 2024 – Present

Narsee Monjee Institute of Management Studies

Bachelor of Technology – Computer Science and Business Systems
Cumulative GPA: 3.40/4.00

Aug 2020 – May 2024

SKILLS

Languages: C, C++, Python, HTML, JavaScript, R-Language, SQL

Software & Tools: MS Office, VS Code, AWS, Azure, Tableau, Jupyter Notebook, GitHub, R Studio, MATLAB, PyCharm, IntelliJ, Canva, Figma, Docker, Slack, Railway, JFLAP

Libraries & Frameworks: NumPy, Pandas, Matplotlib, Seaborn, scikit-learn, Keras, TensorFlow, OpenCV, PyTorch, Streamlit

Databases: Oracle, MySQL, PostgreSQL

TECHNICAL EXPERIENCE

Techmihirnaik Group – UI/UX Intern

May 2023 – Jul 2023

- Designed and developed the user interface and animations for the “Service Box” application, optimized for both **Android** and **iOS** platforms.
- Created and refined user screens and interactive elements using **Figma**, enhancing the overall user experience and visual appeal of the application.
- Improved user engagement by **30%** through intuitive design and enhanced visual appeal using **Figma**.

Solar Secure Solutions – Data Science Intern

Dec 2022 – Feb 2023

- Built and evaluated machine learning models to solve business forecasting problems, improving decision accuracy by **25%**.
- Performed exploratory data analysis and statistical modeling on structured datasets; created **20+** visualizations for stakeholder insights.
- Developed end-to-end predictive analytics pipelines using **Python**, leveraging **scikit-learn**, **numpy**, and **pandas** to enable data-driven business decision-making.

ACADEMIC PROJECTS

FoodieSafety – AI-Powered Food Recall & Safety Platform (Capstone Project, Boeing-Mentored)

Aug 2025 – Dec 2025

- Designed and developed a full-stack web application to deliver real-time food safety and recall alerts for U.S. grocery shoppers.
- Built a **FastAPI**-based backend with **JWT** authentication, secure password hashing, and **REST APIs** for user accounts and product tracking.
- Implemented an automated recall ingestion pipeline using **AWS Lambda**, **EventBridge**, and **OpenFDA APIs** to fetch, parse, and store recall data in **DynamoDB**.
- Integrated **LLM**-based features to generate recipe recommendations for soon-to-expire products, helping reduce food waste.
- Deployed containerized services using **Docker** on **AWS EC2**.

Healthcare Analytics Dashboard - [Project Link](#)

Sep 2024 – Dec 2024

- Developed a real-time healthcare analytics platform hosted at **Railway.app** for stakeholders like administrators, doctors, and medical store owners.
- Integrated and optimized **PostgreSQL** for storing and analyzing **500+** records, covering patient vitals, prescriptions, and ambulance operations.
- Implemented **LLMs** for generating query-based insights and visualizations (e.g., charts, heatmaps) to identify trends in disease patterns, medical inventory, and vitals.
- Designed and developed interactive dashboards using **Streamlit**, enabling role-based access and improving data-driven decision-making for **10+** user categories.

Smart Mirror with Face and Voice Detection – (AI-powered Smart Mirror)

Oct 2023 – Mar 2024

- Engineered the **MagicMirror** platform on **Raspberry Pi 3**, transforming a standard mirror into a smart, interactive display.
- Integrated essential modules, including Calendarlabs iCal, OpenWeatherMap, MM-Motion, MM-GoogleAssistant, MM-Detector, MM-Screen, and The Hindu RSS Feed, enhancing functionality.
- Configured and assembled hardware components, including a one-way glass mirror, custom wooden frame, **Acer S200HQL** monitor, and **HP W100** webcam with a built-in microphone, ensuring seamless operation.