

AMIT LUHAR

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Education

State University of New York at Binghamton
Master of Science in Computer Science

Dec 2024
3.71/4.00 GPA

Experience

AI Engineer - App Dev I, Flow Global Technology LLC, TX

Jan 2024 - May 2024

- Collaborated with the backend team to integrate a **Mixtral 8x7B large language model** for sales data processing and AI-driven text/document handling on a **Django SaaS platform**.
- Enhanced AI assistant accuracy for sales queries and document management using **Retrieval Augmented Generation**, achieving a **31% increase in data sifting efficiency**.
- Developed and optimized **Flutter components** for seamless front-end integration and user experience.
- Streamlined **Flutter development workflows** using **Figma** for design handoffs and **Jira** for managing bugs and feature tickets, ensuring efficient delivery.

Software Engineer, Tata Elxsi, Pune, India

Aug 2021 - Jun 2022

- Contributed to **Tether**, Tata Elxsi's **Connected Vehicle Platform**, to collect **sensor telemetry data** of various automobile **Electronic Control Units (ECUs)** & transmit on **centralized on-premise cloud server**, allowing analysis of **usage patterns**.
- Managed diverse **CAN protocols**, ensuring the concurrent transfer of **30 million vehicles' data** via **Kafka stream**, pipelined through **Airflow**, and scaled using **Kubernetes**, enhancing the **user experience**.
- Fabricated a **car health feature** on the mobile app by integrating a **machine learning model** trained on **telemetry car data**.
- Engineered a **car control module** on the app, enabling users to **remotely control their cars from anywhere in the world**.

Software Developer Intern, Talent Excel, Mumbai, India

Jan 2021 - Jun 2021

- Created a **cross-platform augmented reality learning application** using **Unity** and **Flutter**, enhancing **middle school students' educational experiences**.
- Designed an **achievement tracking system**, leading to **40% increased engagement** among children. The app was launched in **16 schools**, reaching over **2,000 students within 2 months**.

Projects

DataInsight | Node.js, Langchain, AWS, PyTorch, React, Docker, RAG

Jul 2024 - Nov 2024

- Devised an **Agentic RAG web application** using **Langchain** to assist data analysts by providing **data insights from CSV files**.
- Developed **AI agents** for a **recommendation system** that analyzes data, trains **machine learning models**, and provides trained models to users for **data visualization** and meaningful inference.

NaviDrive | Android Studio, Tensorflow Lite, Cassandra, AWS

Apr 2024 - Jun 2024

- Crafted a **real-time Android app** by fine-tuning **SSD Mobilenet v2** for detecting **vehicles, traffic signs, traffic lights, and pedestrians**, achieving an **inference time of less than 100ms** and **38 mAP accuracy**.
- Published research in the **International Journal of Research and Analytical Reviews**, Vol 8 Issue 2, [**LJRAR_234008**].

AssignmentX | Flutter, Express, Docker

Oct 2020 - Jun 2021

- Built a **Flutter application** that generates assignments **mimicking handwritten text**, achieving over **5,000+ downloads** on the Play Store, **200+ daily active users**, and **32K+ views on YouTube**.
- Utilized **Pillow** and **OpenCV** to process images and incorporated a **human behavioral algorithm** to replicate **natural handwriting**, producing results in under **450ms**.

Technologies

Languages: Dart, Python, JavaScript, Java, TypeScript, C++, C#, Rust, Bash, PowerShell, R, Go, Ruby, Swift

Web Technologies: React, Flask, NextJS, NodeJS, Django, FastAPI, Express, ASP.NET, Angular, HTML, CSS, Jinja, YAML

Programming Frameworks: Flutter, PyTorch, OpenCV, TensorFlow, Langchain, React, Express, Scikit-learn

Databases: SQL, PostgreSQL, Azure SQL, Redis, AWS RDS, MongoDB, DynamoDB, Firebase, Firestore, MySQL, Cassandra

Cloud & DevOps: Azure, AWS, CI/CD, Kubernetes, Docker, Jenkins, Terraform, Ansible, PowerShell, Yarn, NPM, Azure Functions VM Blob, AWS Lambda S3 EC2, RBAC, , Nginx, GitHub

Operating Systems: Windows, Linux (CentOS, Ubuntu), macOS, Embedded Systems, RaspberryPi, Arduino

APIs and Protocols: REST APIs, OpenAPI, Swagger, WebRTC, SOAP, GraphQL, MQTT, WebSocket, OAuth, JSON-RPC

Tools: Kafka, PySpark, Dask, Apache Airflow, Git, Docker, Kubernetes, Jira, Azure AKS, Metamask, Fireblocks, Cron, WebSockets

Technologies: Computer Vision, NLP, Linux, CI/CD pipelines, Docker, Git, AWS, Firebase