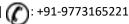
AYUSH MANIAR

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EDUCATION AND SCHOLASTIC ACHIEVEMENTS

University of California, San Diego

Master of Science in Computer Science

Indian Institute of Technology, Madras

Bachelor of Technology in Electrical Engineering

Sep 2024 - Present CGPA: 4.0/4.0

Jun 2017 - Jun 2021

Chennai, India

PROFESSIONAL EXPERIENCE

Data Scientist - III

Jul 2021 - Aug 2024

Walmart Global Tech India | SAMS Club

Bangalore, India

- Implement time series algorithms as the **Primary Inventor of a patented innovation** to **predict accurate Transit times** for carriers used by SAMS Club, including FedEx and Pilot. This breakthrough reduced order to promise (OTP) time by 1.2 days, increased on-time deliveries to 71%, and boosted order conversion by \$56M.
- Developed a robust **Delivery Delay prediction** model for SAMS Club online orders with Recall: 75%, Precision: 98% thereby improving postdelivery NPS (Net Promoter Score) by 20 points and reducing WISMO (Where is my order) calls by 46%, owing to the massive success of the project, it was presented to the CTO of SAMS Club Vinod Bidarkoppa during FY22-23 Al & Machine Learning Innovation showcase
- Authored a white paper on order sourcing optimization which reduces split deliveries by 40% and transportation cost by \$21M using Mixed Integer Linear Programming with COIN-OR Branch and Cut (CBC) and CPLEX
- Built an algorithm on Safety Stock Optimization which ensures availability of online inventory by predicting the Walk-in sales at an itemclub level thereby boosting online sales by \$40M

Feb 2018 - Apr 2020

Eye In The Sky, A Deep Learning & Computer Vision Startup | Disaster Management

Dr. Kaushik Mitra | IIT Madras

- Led a team of 5 AI engineers and raised INR 19.5 Lakhs in equity-less funding
- Built an Activity Recognition model by integrating a LSTM classification model with Pose Estimation to detect SOS signal
- Developed a "Consciousness Detection" algorithm using Lucas-Kanade Optical Flow and YOLO to detect people who are immobile while taking in account the relative velocity components of the drone with respect to the ground
- Develop a real-time algorithm for generating 2D maps using top-down video feed from drones at high altitude of 300m
- Led successful field tests in collaboration with National Disaster Response Forces (NDRF), demonstrating system capabilities like drone deployment, unconscious person detection, and transmission of GPS coordinates of survivors for rapid rescue

RESEARCH PROJECT

Reasoning for Multi AI Agent Coordination (Minecraft)

Research; Guided by Prof. Prithviraj Ammanabrolu and Prof. Lianhui Qin

Jul 2021 - Present MS San Diego, USA

- Developed a suite of multi-agent peer-to-peer collaboration tasks testing different aspects of collaborative reasoning such as sharing resources, skill sets, expertise and information
- Leveraged the function calling abilities of Large Language Models (LLMs) to ground agents in the world of Minecraft by creating custom tools
- Conducted comparative evaluations of contemporary language models, highlighting success rates across tasks and providing insights into multi-agent collaboration efficiencies

SKILLS

Python, Pytorch, Huggingface, LangChain, smolAgents, SQL, Databricks, JavaScript, TensorFlow, Git, Linux, PySpark, StreamLit

ACHIEVEMENTS

- Received Excellence Award for ideating and deploying 3 innovations creating an impact of \$120M at Walmart Global Technology
- Raised INR 10 Lakhs among top 20 innovative startups in India as a part of Indian Innovation Growth Program
- Awarded the International Microsoft 'AI For Earth' Grant for "Eye In The Sky" startup, granted to only 202 projects at the time. The award facilitates projects which utilize AI to solve global environmental problems with US 5000\$ cloud compute
- Invited to Microsoft Headquarters, Redmond, USA to present "Eye In The Sky" startup at AI For Earth Summit (2019)