Ankit Das

◍ Bengaluru, India ✉ ankitdas.profession@gmail.com ☎ +91-8088254338 in linkedin.com/in/-ankitdas-

Skills

ML & DL Techniques: LLMs, VLMs, AI Agents, RLHF, Natural Language Processing (NLP), Computer Vision, CNN, RNN, GAN, Reinforcement Learning, Data Wrangling and Visualization

Programming Languages: Python, Java, JavaScript, C/C++, SQL, R

Frameworks: Langchain, TensorFlow, Keras, PyTorch, JAX, Paddle, Scikit-learn, Pandas, Numpy, Matplotlib, SpaCy, Flask, Django

Database & Visualization: MySQL, SQLite, MongoDB, HDFS, Tableau

Big Data: Data Mining, Data Warehousing, Hadoop, RabbitMQ, Apache Kafka

Cloud Technologies: Docker, Azure ML, Google Cloud ML Engine, GCP, Google APIs, AWS

CI/CD: Git, GitHub, GitLab, Jenkins, Bitbucket, Git Actions

Experience

AI Software Engineer (Contract) *Remote, India*
Microsoft (via Volga Partners) *Mar 2024 – Present*

- Currently working on the Data Generation Azure ML pipeline for training enterprise Copilot (BizChat)
- Elevated success rates by 34% on Outlook & Food-Delivery queries and by 10% on benchmarking evaluations through enhancing UI actions with pyautogui and prompt optimizations for Pika
- Integrated external benchmarking platforms like OSWorld with parallelization on Azure, enhanced evaluation speed by 5× for Automated Agents for Computer Use (Pika)
- Engineered a GPT-4o–powered automated AI Agent to validate ImageQnA (Bing Image Search) in 4 languages (EN/ES/FR/JP), replacing manual testing. Achieved 94.6% F1 score and 97% precision, surpassing human evaluator consistency by 22%

ML Engineer *Bengaluru, India*
Sival DevOps Software Pvt. Ltd. *Jan 2023 – Mar 2024*

- Spearheaded end-to-end development of the Intelligent Road Safety System, architecting PyTorch and Paddle license-plate detection models to process CCTV feeds in real time at 25 FPS on edge devices
- Expanded training data by 17× to 2 million images via OpenCV augmentation and GAN-driven weather/noise simulations, achieving robust detection across varied lighting scenarios
- Deployed KNN-based anomaly detection to flag suspicious vehicle movements, accelerating incident response by 10× and driving a 65% boost in road-safety outcomes
- Orchestrated containerized AWS/GCP deployments using Github Actions with optimized database and network configurations, delivering 88% higher system uptime and seamless scalability

Research Intern *Bengaluru, India*
Amazon (Alexa) *Jul 2022 – Sep 2022*

- Conducted research on Zero-Shot Transfer Learning models for intent classification and slot-filling tasks
- Leveraged state-of-the-art transformer models (m-Bert and XLM-Roberta) on TensorFlow framework and implemented Zero-Shot Transfer Learning techniques to train the model only on English and French (33k samples) using the Amazon Massive Dataset
- Achieved impressive accuracy in new languages: 86.3% in Swedish, 79.2% in German, and 70.6% in Hindi, potentially enabling Amazon Alexa to enter new markets and serve a wider audience

Data Scientist Intern *Bengaluru, India*
ShrotaHouse *Mar 2022 – Jun 2022*

- Led the analysis of video metadata using spaCy (NLP) framework to extract features and built a knowledge base of over 2 million videos

- Designed a collaborative filtering algorithm based on content similarity and user preferences, leading to a 30% improvement in personalized recommendations
- Designed a user-friendly interface using Flask and Jinja for data visualization, exploration, and recommendation insights
- Increased user engagement by approximately 35%, leading to a more satisfied user base and a 15% reduction in user churn

Research Intern   *Bengaluru, India*
IISc (CST Department)   *Nov 2021 – Feb 2022*

- Led research aimed at improving plasma arc analysis for industrial applications, addressing existing methods' lack of accuracy and detail extraction capabilities
- Led the team of research interns to create an ensemble model combining SVM, KNN, CNN, and VGG16 architectures, leveraging their complementary strengths on Plasma Arc captured at 18,000 FPS
- Yielded exceptional accuracy of 95-99% in plasma arc detection, enabling precise size and shape extraction. Contributed to improved plasma process control and enhanced safety in industrial settings

Education

BMS College of Engineering   *Bengaluru, India*
B.E. – Information Science and Engineering   *2019 – 2023*

- CGPA: 9.27/10

Projects

Video Quality Enhancement   *2024*

- Developed a highly scalable video quality enhancement architecture using FILM and Real-ESRGAN models with multiprocessing which enhances a 2hr video in about 2mins on a Nvidia A100 GPU
- This system achieves $10\times$ faster processing than traditional methods (RIFE & DAIN), transforming 360p videos to high-quality 1080p with great details

Intelligent Face Recognition System   *2024*

- Built an intelligent face recognition system with YOLOv9, Deep Sort, and FaceNet
- Optimized for real-time performance (25 FPS) and boasts a user-friendly API for easy enrolment/removal
- Achieves real-time recognition with minimal hardware requirements (8GB GPU RAM, 8GB RAM) and a 5-sec enrolment process

Certifications

- Hadoop Developer Professional Certificate, IBM (Oct 2023 – Oct 2026)
- Fundamentals of Reinforcement Learning, Coursera (Aug 2023)

Achievements

- Judge – Dataverse, 24hr Data Science Hackathon, Phase Shift 2023
- 3rd Place - Data Overflow, Data Programming Hackathon by Affinity Answers