AMISHA DAS

• Leighlinbridge, Co. Carlow, Ireland - R93W205









PROFILE

- Passionate data scientist and programmer pursuing an MSc in Data Science (GOI-IES Scholar, top 1%) at SETU, Ireland. 2.5 years of hands-on experience in data analytics, machine learning, and app development.
- Strong skills in Python, Data Analysis/Visualisation and Machine Learning, PyTorch, Statistics, Flutter/Dart, Tableau, Firebase.
- Completed dissertation on evaluating pseudo-labels for semi-supervised learning model galaxy distance estimation. Pre-print in process while also building user facing LLM bots.
- Proven impact through real-world projects—from a research using real world astronomy survey data, a COVID plasma donor app to a full-stack student guidance mobile app.
- Seeking roles that help me and my organisation grow using data science, AI or R&D. Fully work eligible (Stamp 2 upgradeable to Stamp 1G visa in Oct 2025, no sponsorship required).

TECHNICAL SKILLS

Top Languages

- Python: Used in previous data analysis jobs, current university curriculum for ML research (PyTorch) and coursework, as well as side projects such as ML Models, LLM chatbots, and fun pet projects and scripting.
- Dart: Developed five apps using flutter/dart; two published to playstore.

Technologies

- · Astroinformatics, SQL, PyTorch, Pandas/numpy/scikit-learn, google colab/jupyter notebook, Firebase, AWS Services, MongoDB
- Deep-learning and ML algorithms (XGBoost, MLP, CNN, LLMs such as GPTs, Sonnet and LLaMA).
- RStudio/Rmd, Tableau, Flex Dashboard, Excel/CSV/JSON, meta ads analytics, automation with Zoho, webRTC on iOS and Android with videoSDK.live, postman, VSCode, Android Studio, Figma
- Dabbling in beginner level web development with Javascript, React and FASTAPI.

EDUCATION

South East Technological University (IT Carlow), Ireland

Sept 2024 - Oct 2025

Master of Science in Data Science

- GOI-IES Scholar, University Ambassador and Class Rep
- Dissertation- "Uncertainty-Informed Evaluation of a Semi-Supervised Learning Technique: Pseudo-Labels for Photometric Galaxy Redshift Estimation"
- Tentative Result: 78.23% (First Class Honours)

Jagran Lakecity University, Bhopal, India

July 2019 - Dec 2022

Bachelor of Computer Application

- Amongst the class toppers
- Created 3 flutter apps
- CGPA: 8.32 (First Class Honours)

St. Joseph's Convent School, Bhopal, India

2007 - May 2018

Higher Secondary School

- Fields: commerce + computer science
- Very active in extra-curricular activities
- Final Percentage: 77% (First Division)

iKounselor Ed-Tech Jan 2024 - Jun 2024

Data Analyst and Developer

Bhopal, M.P., India

In charge of extracting customer data from CRM platforms, Meta ads and creating comprehensive reports and analysis to form strategies and alter target audiences for marketing purposes. Analysed profitable domains that increased social media engagement by 14%.

Meanwhile, I also developed the iKounselor app for iOS and Android that helped students find instant counselling and study abroad information. Developed python scripts for data mining and writing onto MongoDB.

Technologies: Python Scripting, matplotlib/pandas, Google Colab, Tableau, MongoDB, Dart/Flutter, API (REST), Firebase, Android and iOS development, Postman, Figma

TwiLearn EduTech Pvt. Ltd. and Young Unitee

Jul 2022 - Mar 2023

Data Science and Research Internships

Remote and On-Site (Bhopal. M.P., India)

Collected and analyzed structured datasets for market trends, demographics, and HR/sports analytics. Built <u>Tableau dashboards</u> and Python pipelines, crafting clear data stories and insights through visualizations and written reports.

Technologies: Report writing, Tableau, Google Colab, Python, Excel, Python, Jupyter Notebook/Google Colab, Data Analyses/Statistics, story dashboards

Slinkshot - The first Gaming-only Social Network

Jul 2021 - Apr 2022

Flutter Developer Intern

Italy - Remote

Android app development, performance, functionalities, API, UI and data management. Managed the app alone for a few months as well and rolled updates. Experience in working with a completely international team from all over the world.

Technologies: Flutter, Data Science, Data Analytics, Android Studio, Android Development, Android SDK

PROJECTS

Research Paper - Assessing Pseudo-label Quality (Preparing Preprint)

Feb 2025 - Present

Python, XGBoost, MLP, PyTorch, NumPy, SQL, Real World Dataset

- Created a 5-phase research pipeline for assessing the quality and effects of pseudo-label quality in semi-supervised learning models. Used with real world time-series data for regression, telescope data (SDSS) and applied PCA-Distance, MC-Dropout and ensemble.
- Novel insight: Trust based stratification of pseudo-labels does make a difference in pseudo-label trained models. XGBoost especially benefits from high-trust labels but shallow MLPs suffer.

Personality Driven AI Chatbot (in production)

Apr 2025 - Present

Python, React/TypeScript, FASTAPI, Sonnet 3.7, (LLM), MongoDB, FAISS

- Designed and maintained instruction-tuned AI chatbots using LLM APIs (Claude- Sonnet) for immersive user simulations. Built memory-retaining (LTM/STM) conversations using FastAPI backend and MongoDB for session tracking and persona context.
- Creating highly detailed personality/system prompts that improved consistency and response quality across multi-turn interactions. Conducted qualitative analysis of chatbot behavior and implemented feedback loops for ongoing refinement.

PlasmaLead-India's Plasma Donation App

Mar 2021 - 2023

(Flutter, Firebase, Dart, Android SDK, Google Playstore App

Social welfare app where recovered covid-19 patients can donate their plasma to help others recover. Helped hundreds to find plasma donors during the peak of covid-19 pandemic.

AWARDS

GOI-IES 2024 Scholarship

Government of Ireland - Higher Education Authority, Ireland

June 2024

Top 1% (60/5800) applicants. The GOI-IES is aimed at top-level international students which rewards students with a full stipend and complete fee waiver for one year.

Silver Medal (School Topper)

Silver Zone Foundation 2015

Won silver medal for the International Computer Science Olympiad at school level.