Tanmay Suhas Jagtap

Galway, Ireland | Stamp 1G | +353874852825 | tanmayjagtap78@gmail.com | LinkedIn | GitHub | Portfolio

SUMMARY

Data Scientist with over 5 years of experience in machine learning and data science. Proven track record of building scalable data pipelines, deploying machine learning models, and leading high-impact projects in industries ranging from financial services to AI-driven innovation. Skilled in collaborating with cross-functional teams to drive business growth through data-driven insights. **Holding a Stamp 1G work permit** and eligible to take up full-time employment in Ireland.

TECHNICAL SKILLS

Languages: Python, SQL, HTML, CSS, JS, R**,** C#
AI/ML: TensorFlow–Keras, SK-learn, Langchain , FastAPI, Firebase, Streamlit, Git, PowerBI, Spacy, GCP, OpenAI
Analytics: PostgreSQL, PowerBI, SQLite3, Pandas, Apache Spark, Excel

PROFESSIONAL EXPERIENCE

AITON   *Galway, Ireland*
Data Scientist-Intern   **June 2024- Present**
- Developed a product recommendation model utilizing **OpenAI** embeddings based on user activity, enhancing personalized customer experiences improving monthly sales by **12%**.
- Deployed the recommendation solution across multiple Shopify websites using **Firebase and Flask**, streamlining implementation for e-commerce clients.
- Built an AI chatbot for customer support with **Voiceflow**, reducing human intervention by 10 hours weekly.

Morningstar   *Mumbai, India*
Associate Manager - Data Science   **Oct 2022 – Aug 2023**
- Worked on a **Large Language Model (LLM)** project, using the **GPT-3** embeddings to extract KPIs from over **500 company** sustainability reports, which resulted in a **37% increase** in the accuracy and automation of KPI extraction.
- Developed **predictive model [Random Forest, XGBoost]** to predict the **Environmental, social and governance (ESG)** ratings of companies based on extracted KPIs and historical ratings.
- Integrated a new ML solution using **Python** into **3 existing** solutions, using KPIs to achieve a **18% efficiency** improvement.
- **Led 5 POCs** to extract data from ESG documents, demonstrating advanced data handling.
- Performed **A/B testing** for model selection as which model is more helpful for analysts.
- Created **Power BI** dashboards and **SQL reports** to track performance metrics, supporting data-driven decisions.

Research and Innovation, TCS   *Mumbai, India*
Machine Learning Engineer   **Jan 2020 – Oct 2022**
- Leveraged **AI/ML** algorithms in **Python** to enhance product performance, achieving an up to **5x efficiency** boost and reducing processing time.
- Filed a patent for background removal in ID card scanning for KYC (PATENT), reducing processing time by **99% from 48 hours to 2 minutes**.
- Designed and maintained **relational databases** for storing extracted metadata from legal documents, streamlining data storage and retrieval, and making the process **5x faster**.
- Developed a core library for information extraction from legal documents (images/text). Integrated Word2Vec with NER using transfer learning, improving accuracy by **12%**. **Tools: Spacy, NLTK.**
- Exposed APIs and deployed models using **Flask, FastAPI and Firebase**.

Aniruddha Telemetry System   *Mumbai, India*
Computer Vision Engineer   **April 2019 – November 2019**
- Developed a **predictive system** to detect and classify outlier capsule batches, using **OpenCV** and machine learning algorithms to improve sorting accuracy and efficiency.
- Designed computer vision system for vehicle Speed Detection using surveillance cameras.

EDUCATION

University of Galway   *Galway, Ireland*
Masters in Business Analytics   **Sept 2023 - June 2024**
Vivekanand Education Society Institute of Technology   *Mumbai, India*
Bachelor of Engineering in Electronics & Telecommunication   **July 2015 - May 2018**

PROJECTS

RAG based Data Analyst **[Langchain, JS, GPT 4o, SQLite3, FastAPI]**
Implemented a chatbot powered by ChatGPT for Interacting with multiple datasets and getting answers of business questions which help to make business decisions.

Chat with PDF using LLMs **[Langchain, Streamlit, GPT, BERT]**
Implemented a chatbot powered by ChatGPT for interactive PDF document interaction, utilizing Huggingface models for enhanced performance.

Face Mask Detection Using RetinaNet and TF-2.1 **[TensorFlow, OpenCV]**
Developed a predictive computer vision model with 95% accuracy using RetinaNet to detect face masks, helping to enforce mask-wearing protocols in real-time workplace environments during the COVID-19 pandemic.

COVID-19 Open Research Dataset Challenge **[Pandas, Numpy, SK-learn]**
In response to the COVID-19 pandemic, the White House and a coalition of leading research groups have prepared the COVID-19 Open Research Dataset. I tried to visualize this data to verify its spray pattern.

Diamond Price Predictor **[Pandas, Linear regression]**
Created a predictive model using Linear Regression to estimate the price of diamonds based on attributes such as color, cut, clarity, and carat weight. The model accurately predicted diamond prices, achieving an R-squared score of 85%, making it a reliable tool for pricing estimation in the jewelry industry.

Spotify Music Predictor **[Pandas, Numpy, SK-learn, XGBoost]**
Developed a classification model to predict users' music preferences using features from Spotify's music library, achieving a 78% prediction accuracy.

ACCOMPLISHMENTS

1st Prize, Datathon 2024, University of Galway
Recognized for innovative data solutions and outstanding performance in the Datathon 2024 at the University of Galway. Led a team to win the top prize for developing **advanced data analytics models**.

IP Creation Award - Award for Excellence in Patent Filing
Honored for excellence in innovation and **intellectual property creation**. Awarded for successfully filing a patent, recognizing significant contributions to novel technology development.

1st Prize, Data Science Hackathon by GreyAtom
Secured first place in GreyAtom's Data Science Hackathon by developing an insurance claim prediction model for travel insurance. Demonstrated expertise in **predictive modeling** and **data analysis**.

On The Spot Award (August 2021), TCS Research and Innovation
Awarded by TCS Research and Innovation for exceptional performance and immediate impact in **delivering research-based solutions**. Recognized for contributing to key projects.

Cleared TCS Digital Capability Assessment
Successfully passed the TCS Digital Capability Assessment, demonstrating **advanced technical and digital skills** in areas critical to the organization's innovation and growth.

CERTIFICATIONS

Data Science Masterclass, GreyAtom School of Data Science
Applied AI with Deep Learning and Signal Processing (IBM), Coursera
Advance Machine learning and signal processing, Coursera