

Summary

As a Computer Science graduate with a focus on Artificial Intelligence, I am passionate about AI, particularly in Large Language Models (LLMs), and have a strong desire to apply these technologies to solve real-world problems. I am actively expanding my Machine Learning and cloud computing (AWS) skills while adhering to best software engineering practices. With a year of experience as a Software Development and QA Intern, I am confident in my ability to collaborate with teams and deliver results. My ultimate goal is to contribute to innovative AI and ML projects with practical impact.

Education

Brunel University London *BSc in Computer Science (Artificial Intelligence) – Graduated with a 2:1* *September 2020 – June 2024*

Projects

Tip-Of-Tongue Known Item Retrieval for Movies – Final Year Project

- Developed a conversational AI system leveraging NLP and LLMs (Llama 2 via Langchain) to retrieve movie titles based on partial user memories.
- Applied autoencoder-based anomaly detection (TensorFlow, Keras) to identify unique aspects of movie plots.
- Used vectorization techniques (word embeddings, cosine similarity) to dynamically refine search results.
- Achieved 80% accuracy in retrieving correct movie titles through iterative questioning.
- LLMs, NLP, ML model development, vector embeddings.

Text Summarization using Map-Reduce & Refine

- Built a text summarization tool using Langchain and Mistral-7B for context-aware summaries.
- Implemented map-reduce techniques to split text and improve summarization accuracy.
- Extracting insights from unstructured text, crucial for ESG data summarization.

Stock Price Prediction with ARIMA

- Built a time-series forecasting model using ARIMA to predict hourly stock price movements.
- Preprocessed and analyzed historical stock data to identify trends and evaluate model performance.
- Data modeling, forecasting, and analysis relevant to ESG risk assessment.

Image Classification Using Satellite Data

- Developed a CNN-based model to classify satellite images (cloudy, desert, green area, water).
- Applied transfer learning for improved accuracy and computational efficiency.
- Feature extraction, ML model deployment, real-world data processing.

Sustainable Clothing Shopping Website

- Developed a full-stack web application enabling users to shop for sustainable clothing.
- Implemented features such as user reviews and ratings to enhance user engagement.
- Technologies used: HTML, CSS, and JavaScript, Node.js
- Demonstrates proficiency in building web-based applications and handling both frontend and backend development

Live Horse Betting Website

- Led a team to develop a dynamic betting website using the Django framework.
- Focused on robust backend functionality and intuitive frontend UI design.
- Technologies used: Django (Python), HTML, CSS, JavaScript.
- Demonstrates ability to manage full-stack development projects and work collaboratively in a team setting.

Experience

Software Development & Quality Assurance Intern Transputec Ltd Sept 2022 – June 2023

- Developed and executed automated test cases using Selenium & C#, improving test coverage by 85%.
- Collaborated with teams to resolve 100+ software defects, enhancing product reliability.
- Worked in an Agile (SCRUM) environment, optimizing development workflows.
- Assisted in data validation and automation, ensuring consistency across system modules.

Relevance: Python automation, data validation, Agile experience—essential for ML model deployment and ESG data pipelines.

Skills

- Programming: Python, SQL, JavaScript, C#
- ML/AI: NLP, LLMs (Llama 2, Langchain), TensorFlow, Keras, PyTorch, ARIMA, LSTMs, Autoencoders, Word Embeddings
- Data Engineering & MLOps: AWS, Docker, Flask, Pandas, NumPy, Spark, SQL, Data Pipelines
- Software Dev & Agile: React, Node.js, Django, Selenium, PyTest, Git, CI/CD, SCRUM, JIRA

Achievements

Brunel+ Awards: Bronze
2nd place in First year coding contest (UKIEPC)
Participant in Euro 2020 Chelsea Challenge 2.0, Chelsea FC Foundation

Certifications

Bright Network: Completed Google Coding Challenge Tech
Allies Network: Completed IBM Design program