Jadesola Bejide

jadebejide@gmail.com linkedin.com/in/jadesolabejide jadesolabejide.dev/portfolio github.com/jade-bejide

Education

University of Edinburgh (September 2024 - September 2025)
Msc. Artificial Intelligence
Major: Natural Language Processing

University of Bristol (September 2021 - May 2024)
Bsc. Computer Science - First Class with Honours

About Me

Interested in Machine Learning Engineer roles especially relating recommendation algorithms, NLP or simulation. I hope to integrate my industry experience in High Performance Data Processing with my academic background in Machine Learning.

Skills

Programming Languages Python, Java, TypeScript, SQL, C#, Golang, C
Tools PyTorch, Scikit-Learn, Pandas, NetworkX, AWS, Kubernetes, ASP.NET

Experience

The Trade Desk, Software Engineering Intern (June 2024-September 2024)
- Implemented an ASP.NET C# gRPC backend service which unifies various sources of targeting data.
- Revamped an existing dashboard which displays targeting data into a more user friendly application. moving from a .NET website to a Streamlit application which calls the gRPC backend via FastAPI.
- Dockerised and deployed frontend and backend on remote Kubernetes clusters.
- Secured the gRPC backend service behind elevated role-based access control. This made use of a Publish-Subscriber model with an SQL database for persistent storage.

Amazon Prime Video, Software Development Engineering L4 Intern (June 2023-September 2023)
- Automated the calculation of scaling forecasts for high velocity events such as the English Premier League and NFL Thursday Night Football for teams and their dependencies to scale their service fleets
- Reduced human error and speed up time taken to produce a scaling forecast by 99%
- Tech stack included an API Gateway Java backend application and ReactJS with Typescript frontend, with an AWS CDK managed pipeline

University of Bristol, Teaching Support Role (October 2022-May 2024)
- Mentored students for the Software Engineering Project and Parallel & Distributed Computing modules
- Covered the modules Software Tools (Linux Administration and Web Programming) and Functional Programming (Haskell) in the 22-23 academic year
- Provided support for first year students with the course content and assistance with the lab exercises

Extracurricular Activities

University of Bristol, Bristol Computer Science Society Treasurer (May 2022 - July 2023)
- Prepared and authorised a range of financial documents such as invoices and balance sheets
- Budgeted effectively to manage committee funds whilst liaising with the President and Vice President.
- Collaborated with other committee members in meetings and regularly reported the committee's financial health.

Honours and Awards

University of Bristol, Best Individual Project Poster Award (May 2024)
- Prize of £25 for top dissertation poster out of over 100 final year Computer Science students.

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University of Bristol, Netcraft Prize (August 2023)

- Top 10 Second Year Computer Science Student (Dean's List)

Projects

Dream Journal (February 2023)

- Trained a Latent Dirichlet Allocation model which takes a dream journal entry as input and infers the underlying emotion of it using the DreamBank dataset as the training data
- Utilised NLP libraries gensim and nltk and packaged the model in a Fast-API endpoint

Social Recommender System (2020-2021)

- Designed a movie recommender system using data from the IMDb database.
- Exploited a form of collaborative filtering where nearest neighbours were restricted based on who a user follows to diversify how recommendations are generated.
- Tech stack includes Python for the codebase and MySQL to persist data about users, movies and recommendations

Competitions

BDSSxLV Datathon (March 2023)

- Won second place (Best Understanding of the Dataset Prize) as a team of 2.
- Used pandas and matplotlib to generate bar plots of each feature in the dataset to analyse gaussian trends and remove features that didn't represent gaussian relationships.
- Used a range of machine learning methods, the best performing model being Logistic Regression with an F1 score of 0.899.

BDSSxLV Datathon (March 2022)

- Won second place (Innovation and Explainability Prize) as a team of 5 with a model score of 0.9558.
- Designed a binary classifier that used a training model of whether a customer received caravan insurance, written in Python and presented using Jupyter Notebook.
- Utilised feature engineering and linear regression to classify the unlabelled data set.

Coursework

Machine Learning Coursework (December 2024)

- Authored an eight page report applying machine learning models to datasets such as for activity recognition, whilst concisely describing the mathematical foundations of such models
- Scikit-learn was used to train the machine learning models and Jupyter Notebook was used for visualisation and organisation
- Critically evaluated the application of various machine learning models based on, for example, time taken, accuracy, suitability based on the target variable and interpretability
- Performed data preparation techniques such as dummy encoding and removing multicollinear variables to the Soul Bike Sharing Demand Prediction dataset to optimise the data

Image Processing and Computer Vision Coursework (December 2024)

- Authored a three page report describing and critically evaluating a dartboard detection computer vision model I trained
- The initial model was trained using the Viola Jones algorithm and this was enhanced by various techniques such as using Hough circle detection in combination with morphological opening and k-means. Non-Maximum Suppression was also utilised to remove redundant detections, improving the F1-Score of the model by 0.342 on average (across 16 test images)