

Moses Makola

London, UK | mmakola76@outlook.com | [GitHub](#) | [LinkedIn](#)

EDUCATION

UNIVERSITY OF LEEDS

2025-2027

MSc Data Science (Statistics)

QUEEN MARY'S UNIVERSITY OF LONDON

2021-2024

BSc Computing

PROFESSIONAL EXPERIENCE

GLOBAL PURPOSE ENTERPRISE

London, UK

Junior Software Engineer

May 2024 - Dec 2024

- Participated in the engineering of a robust “Tinder” like mentorship application using React Native and Firebase earning numerous corporate sponsorships.
- Developed and integrated a matching algorithm that improved user experience by creating more relevant matches.
- Built an admin panel for sponsors where they can access data insights, analytics and feedback for the mentorship calls on the app. Built using React, Tailwind and NodeJs.

J.P MORGAN CHASE & CO.

London, UK

Software Engineer Intern

Jun 2023 - Aug 2023

- Collaborated with cross-functional teams to design and prototype a FIX RFQ (time-series) message handler successfully replacing the previous system and improving trading efficiency and request processing.
- Presented the project proposal to the global team, demonstrating strong communication skills to ensure alignment across team members.
- Spearheaded the development of an improved manual submission system for prices by processing submissions from SharePoint, enhancing data accuracy and streamlining workflows for improved efficiency.

PROJECTS

Synthetic Voice Translation for Low-Resource Languages

Mar 2025

- Engineered an a speech translation system to generate synthetic voices for underrepresented languages
- Fine-tuned the VITS OpenBible model on specific language corpora, enhancing pronunciation and speech clarity
- Implemented Speech-to-Text, Machine Translation and Text-to-Speech pipelines to automate voice translation
- Presented project findings at Tech Show London's Big Data & AI World 2025

Automatic Speech Recognition for Low-Resource Languages [[Google Colab](#)]

Dec 2024

- Fine-tuned XLSR-53 on the Lingala Read Speech Corpus, achieving a Word Error Rate (WER) of 0.21.
- Preprocessed audio data by standardising sampling rates, creating vocabulary files, and mapping text transcriptions.
- Implemented custom data collators for dynamic padding and efficient batch processing.
- Presented the project to 100+ attendees at the UKBlackTech Christmas Social, demonstrating its value for underrepresented linguistic communities.

Sickle Cell CNN Classifier [[Kaggle](#)]

Nov 2024

- Developed a Convolutional Neural Network (CNN) model using PyTorch to classify blood samples as sickle cell positive or negative with 97.65% validation accuracy and 95.51% test accuracy.
- Addressed class imbalance using weighted loss functions and conducted PCA analysis to explore feature separability.
- Cited in An Image-based Sickle Cell Detection Method ([TechRxiv](#)) by dataset creator for contributions to methodology and dataset application.

ADDITIONAL INFORMATION

- **Languages/Libraries:** Python (pandas, Scikit-learn, PyTorch, NumPy, Matplotlib), Java, SQL, JavaScript.
- **Frameworks/Technologies:** AWS, Azure, Tableau, Git.