Emmanuel Echefu

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EDUCATION

University of Nottingham (Current)
Qualifications: BSc Computer Science With A Semester Abroad

University of East Anglia
Qualifications: BSc Computer Science With A Foundation Year

The Sixth Form College, Colchester
A-levels: Mathematics, Economics, Computer Science and AS Computer Modelling.

St John Payne Catholic School, Chelmsford
GCSEs: Three 7s (Equivalent to A) including Maths and business studies. Seven 6s (Equivalent to low A) including English Language and English Literature.

EXPERIENCE

Work Experience with housing company A2Dominion (Databasing)

- Worked in databasing covering database design and management
  Developed skills in SQL and gained experience in optimizing queries, ensuring data integrity, and performing regular maintenance and backups
  Covered team management and general project management in the tech department

Work Experience with VFX company Escape Studios

- Gained proficiency in Adobe After Effects, Autodesk Maya, and Nuke, and learned to create high-quality visual effects. Developed skills in colour grading, detail-oriented VFX integration, and effective project management while collaborating with teams

Tech Team Stream Producer for Life Church Chelmsford

- Developed proficiency in video production and live streaming technologies.
  Involved operating cameras, managing audio equipment, and using software for live broadcasting and coordinating with a team of experienced individuals.
  Gained experience in troubleshooting technical issues.

Promotional Modelling for The University of Cambridge

- Featured in official university marketing materials including brochures and online advertising campaigns. Contributed to international student recruitment efforts and supported the university's diversity goals.

PROJECTS

AI Stock Price Predictor Using LSTM/GRU

- Built an interactive web app that predicts stock prices using deep learning (LSTM & GRU networks). The app pulls real time financial data from Yahoo Finance, preprocesses it into time series sequences, trains neural networks, then forecasts future prices. Deployed with Streamlit Cloud for easy user access.

(CLI) Python based Repository Manager/Navigator

- Built a Python-based command-line tool that generates a hierarchical tree of a repository and integrates with VS Code for file access. It uses recursive directory traversal with depth control to create the tree and system-level process management to open files externally. Employs cross-platform abstractions to handle file I/O, process execution, and error handling consistently across Windows, macOS, and Linux.

Google Chrome Extension for Youtube

- Built a Chrome extension that strips out auto-generated playlists and autoplay parameters. Built with Manifest V3, using the Declarative Net Request API and webNavigation listeners to normalize short youtu.be links, remove start_radio flags, and block "Mix" playlists (list=RD…). It ensures users are redirected to the intended standalone video without unwanted continuous playback.

AI Study Assistant Using LLMs (Large Language Models) with RAG (Retrieval-Augmented Generation)

- Designing an AI-powered chatbot that indexes personal documents (e.g., PowerPoints, lectures) and answers queries with source references. Currently developing features for document-based quizzing.

Cooking Social Media App

- Developing a full-stack app that tracks pantry inventories, logs meals, and recommends recipes using efficient set-difference queries with Redis caching, while supporting inventory updates, shopping list generation, and offline-first sync. Extending the platform with social features for uploading and browsing user-generated recipes, built with a React Native client and a secure REST/GraphQL backend (PostgreSQL + object storage).

SKILLS

- Programming
  Languages: Python, Javascript, HTML, CSS, Java, C++, C, Lua, Git
- Software Designing
  Creating professional software prototypes based on client requests
- Amateur Graphic Design
- Amateur Databasing
- Modelling