

# FAVOUR ONYINYE EZIKE

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## Profile

MSc Artificial Intelligence candidate with robust software engineering background and hands-on experience delivering AI-powered solutions. Skilled in Python, machine learning, and cloud-based deployment. Seeking a 6-month industrial placement as an AI Engineer or Data Scientist starting September 2025.

## Education

### Birmingham City University

*MSc Artificial Intelligence with Professional Placement*

**Sep. 2024 – In View**

*Birmingham, United Kingdom*

### Udacity

*Nanodegree: Python Full Stack Development*

**Jan. 2020**

*Online*

### Federal University of Petroleum Resources Effurun

*Bachelor of Engineering in Petroleum Engineering*

**Sep. 2012 – Feb. 2017**

*Delta, Nigeria*

## Relevant Coursework

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|----------------------|--------------------|-----------------|-------------|
| • Computing For AI   | • Machine Learning | • Deep Learning | • NLP/LLM   |
| • Data Visualization | • Applied AI       | • Impact of AI  | • SQL/NoSQL |

## Projects

### Semantic Book Recommendation | *Python, LLM, LangChain, OpenAI, ChromaDB, Gradio, Numpy, Pandas* **April 2025**

- Built a smart book recommender system using Python and LangChain to process and embed book descriptions with OpenAI embeddings for semantic search.
- Developed a Gradio-based interactive UI to let users search for books by natural language, emotion, and genre, displaying results with covers and metadata.
- Implemented a ChromaDB vector database for fast similarity search and optimized performance with smart caching.
- Enabled users to discover books based on nuanced emotional and genre criteria, improving recommendation relevance.

### Multilingual Voice Reporting | *Python, Streamlit, Microsoft Azure Cloud Services, Azure CLU*

**April 2025**

- Developed a Streamlit web app enabling users to record voice reports in any language directly in-browser, with no file upload needed.
- Integrated Azure Speech-to-Text for automatic transcription and Azure Translator for instant language detection and translation to English.
- Used Azure CLU for intent classification of issues and automated forwarding of processed reports to local councils via Power Automate webhook.
- Addressed language accessibility gaps for local government service delivery, empowering non-English speakers to report issues seamlessly.

### Fashion MNIST Classification App | *Python, Tensorflow, CNN, Streamlit, Docker*

**March 2025**

- Designed and trained a convolutional neural network with TensorFlow to classify images from the Fashion MNIST dataset.
- Built an interactive Streamlit app for users to upload fashion item images and receive instant predictions with class labels.
- Deployed on Docker and Streamlit Cloud for public accessibility and reproducibility.
- Automated data preprocessing and inference pipeline using NumPy, ensuring fast and accurate results.

## Work Experience

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### Birmingham Women's and Children's NHS Foundation Trust

May 2025 – Present

*MyChart Support Volunteer*

*Birmingham, United Kingdom*

- Support patients and families with Electronic Patient Record (EPR) system navigation and MyChart account activation
- Provide technology literacy training to diverse patient populations on healthcare digital platforms.
- Demonstrate MyChart functions including proxy access, care records access, and clinical communication features.
- Promote digital healthcare adoption while maintaining strict patient confidentiality and professional boundaries.
- Apply customer care skills in sensitive healthcare environments, supporting vulnerable patients and families.

### Turnkey Africa Limited

November 2019 – December 2024

*Software Engineer*

*Nairobi, Kenya*

- Designed and implemented microservices architecture for Life Insurance System using Java with Spring Boot, including key modules (Products, Quotation, Claims, Service Request, Agent Hierarchy) that have been deployed to multiple insurance companies across Africa.
- Built responsive user interfaces using Angular, integrated third-party payment gateways, and provided technical leadership through training junior developers and supporting clients in production environments.

### Afrinvest West Africa

May 2022 – December 2024

*Backend Engineer*

*Lagos, Nigeria*

- Developed RESTful APIs using PHP with Laravel Framework for Optimus by Afrinvest platform, implementing core modules for financial products including Mutual Funds, Savings products, and US/Nigerian Stocks trading.
- Integrated external APIs (Paystack, Drivewealth, Zanibal), implemented robust security features, and designed system architecture diagrams while maintaining high code quality through extensive PHPUnit testing.

### Enye

September 2019 – January 2020

*Software Engineer Volunteer(Remote)*

*San Francisco, USA*

- Collaborated on building an Electronic Voting Application using React.js, Node.js, and Firebase while serving as Scrum Master for Team Giraffe.
- Set up project infrastructure for both backend and frontend components and integrated CI/CD into the GitHub project.

### Andela

June 2019 – October 2019

*Software Engineer Intern*

*Lagos, Nigeria*

- Contributed to multiple internal products including Authors Haven and Travela using PostgreSQL, React.js, and Node.js, while effectively managing stakeholders with strong communication skills
- Implemented comprehensive testing using various frameworks (Mocha, Chai, Jest) and established CI/CD pipelines using Circle CI, Travis CI, and Jenkins with CodeClimate for quality assurance.

## Technical Skills

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**AI/ML:** Python, TensorFlow, Keras, Scikit-learn, Pandas, NumPy, LangChain, OpenAI API, Azure AI Services, NLP, CNNs, LSTM, Data Visualization, Transfer Learning

**Software Engineering:** Java (Spring Boot), PHP (Laravel), JavaScript (Angular, React), Node.js, REST APIs, Microservices, SQL/NoSQL (OracleDB, MySQL, MongoDB, PostgreSQL ), Docker, CI/CD, Git

**Cloud & Tools:** Microsoft Azure, Docker, Streamlit, Gradio, Jupyter, PyCharm, IntelliJ, PHPStorm, WebStorm, VS Code, Jenkins

**Testing:** JUnit, PHPUnit, Jest, Jasmine, Mocha, Chai, Cypress

## Activities / Extracurricular

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Participant, MSc AI Hackathon (ELAN Project), Birmingham City University

Participant, Microsoft EMBRACE (Midlands Regional Hackathon 2025), Microsoft

Contributor, Open-source projects including Jenkins, Mozilla Firefox, and Creative Commons