Oluwadara Adedeji

[Website](#) | [GitHub](#) | [LinkedIn](#) | [Google Scholar](#)

SKILLS

Programming:	Python, C/C++, SQL, Shell Scripting
Frameworks and Toolkits:	NumPy, Pandas, Scikit-learn, PyTorch, Spark, Flask, MLflow, Docker, Terraform, Git
Cloud and Database:	AWS, GCP, Azure, PostgreSQL, DynamoDB

EDUCATION

University College Dublin | **September 2023 – August 2027**
- **Ph.D., Machine Learning**

Thesis: FinHealth: Passive Assessment of Mental Health Using Financial Data (and other data) via Machine Learning

Carnegie Mellon University | **August 2021 – May 2023**
- **M.Sc., Engineering Artificial Intelligence | CQPA**: 3.95/4.0

University of Ibadan | **July 2014 – May 2019**
- **B.Sc., Electrical and Electronic Engineering | CGPA**: 6.2 / 7.0 | **Grade:** First Class Honours

EXPERIENCE

Data Science Consultant, *Health Rhythms, Palo Alto, California* | **May 2024 – July 2024**
- Harnessed Databricks for mental health inferencing and actively contributed insights in weekly team meetings.
- Facilitated patient onboarding for mental health solution, addressing data collection challenges such as incomplete and messy data.

AI Scientist, *CyLab Africa / Upanzi Network, Rwanda* | **January 2023 – August 2023**
- Developed machine learning (ML) models to classify cattle using muzzle images, while collaborating in a Scrum (Agile) environment. Achieved an accuracy of $> 90\%$ on VGG16 and Wide ResNet50 models.
- Designed and developed an advanced signature verification modelleveraging Siamese CNNs for precise identity authentication.
- Engineered feature extraction and ML models to effectively detect smishing in SMS texts, enhancing security and fraud prevention capabilities.

PROJECTS

Stress Prediction Using Multimodal Inputs | [Project link](#)
- Implemented an end-to-end MLOps system to predict stress using combination of text (social media posts) and tabular (linguistic) features with >70% accuracy.
- Included orchestration, experiment tracking, deployment (batch and online) and model monitoring.
  Tools: Pandas, Scikit-learn, NLTK, MLflow, Flask, Mage, AWS Lambda, Kinesis and S3, Grafana, PostgreSQL

Financial Fraud Analysis | [Project link](#)
- Engineered an end-to-end data engineering pipeline, including data ingestion and orchestration, data transformation, and analysis. **Tools**: Mage, GCP, Spark, SQL, Bash, Looker Studio.

Credit Approval Machine Learning System | [Project link](#)
- Developed a credit approval system for assessing credit risk, with a client-side interface using REST API.
  Tools: Python, Flask, TensorFlow, AWS, DynamoDB, Dash

Deep Learning Framework from Scratch | [Project link](#)
- Implemented deep learning algorithms including MLP, CNN, RNN, GRU using NumPy only. **Tools**: Python (OOP)

PUBLICATIONS

G. N. Kimani, **Adedeji O**, Fashingabo P., et. al.**(2023)**, "Cattle Identification Using Muzzle Images and Deep Learning Techniques," arXiv.org. Accessed: Sep. 05, 2024. [Online]. Available: https://arxiv.org/abs/2311.08148v1

Adedeji, O., Owoade, P., Ajayi, O., Arowolo, O. (**2022**). Image Augmentation for Satellite Images. *arXiv preprint arXiv:2207.14580*. https://arxiv.org/abs/2207.14580

HACKATHONS

- Top 15 out of over 1000 participants in the *DataTalksClub MLOps ZoomCamp* | **05/2024 - 08/2024**
- Top 10 out of 25 teams in the 2024 *AWS Gen AI Game Day, Amazon Dublin.*| **05/2024**
- Finalist, *UCC AI Quest*: identification of vegetation patches from drone images using deep learning | **10/2023 – 01/2024**
- Web Intelligence Competition - Classification of Occupations for Online Job Advertisements Challenge | **Ongoing**

HONOURS AND AWARDS

- Mastercard Foundation Scholarship at *Carnegie Mellon University,* **2021 - 2023**
- Dean's Honors Award for First-Class students in the Faculty of Technology, *University of Ibadan* **2014 – 2019**
- *Iyabode Victoria Ojelade Memorial* Scholarship for viable final year projects in Nigeria, **2018**
- *Abel Ogundokun Odeleye Foundation* Scholarship for Leadership and Academic Excellence**, 2015 - 2017**
- MTN Foundation Scholarship for Science and Technology for 500 outstanding students in Nigeria, **2015 – 2018**
- *Etisalat National Merit Award* for 10 outstanding students in Computer Science, Electrical/Electronic Engineering and Economics from selected universities in Nigeria ×2, **2015 & 2016**
- Winner, *Etisalat* Innovation Moment Challenge for *Etisalat* National Merit Awardees, **2016**
- *NNPC/Total* National Merit Award, **2016 – 2018**
- *Agbami* Medical and Engineering Scholarship, **2015 – 2017**
- Overall Best Graduating Student, *Sped International Secondary School* Oyo, **2013**

CONFERENCES / SUMMER SCHOOLS

- Patient and Public Involvement (PPI) Summer School, *University of Limerick*, **2024**
- International Conference for Learning Representations, *ICLR*, **2023**
- IndabaX Rwanda, **2023**
- International Summer School for Advanced Studies on Biometrics, Alghero, Italy, **2023**

COMMUNITY ENGAGEMENT

Facilitator, *NSK.AI Community Workshop* | **09 / 2024**
- Presentation on *AI in Healthcare: Opportunities and Requirements*

Participant, *Dublin Machine Learning Events* | **2023 – Present**
- IBM Research AI Workshop, *IBM* and *Trinity College Dublin*
- Machine Learning Meet Up, *Dogpatch Labs*
- Dublin AI Meet Up*, Weights and Biases*
- Dublin Tech Summit

Member*, Data Science Club, CMU-Africa* | **2022-2023**
- Participated in the Umoja-Hack, Africa's inter-university machine learning competition.
- Emerged the highest-ranking team in Rwanda in the intermediate category and was featured on the CMU-Africa site and social media handles.
- Participated in the 2022 UN Big Data Hackathon, focusing on the energy prices and food inflation theme.

Scholar*, Mastercard Foundation Scholarship* | **2021- 2023**
- Facilitated a mental health training for about 120 young girls in a secondary school in Rwanda.
- Taught about 40 university students Python.

Volunteer, *Mentally Aware Nigeria Initiative (MANI)* | **07/2018 – 06/2021**
- Facilitated outreaches and workshops on mental health and necessary coping skills
- Organized conversation cafes, mental health walks and mental health sensitization of the community as the Programme Head of the Ibadan Chapter, Nigeria.