ABDULMALIK ADEYEMO

abdulmalikadevemo@outlook.com | +2348108273624 | LinkedIn | GitHub

EDUCATION

[08/2015 – 08/2021] B.Eng Computer Engineering, University of Ilorin, Ilorin, Nigeria

GPA: 4.68 / 5.0 (Top 1% out of over 9000 graduated students in 2021)

Relevant Courses: Artificial Intelligence and Applications, Software Engineering, Software Development Techniques, Engineering Mathematics, Engineering Statistics, Control Theory, Fuzzy Logic and Programming, Introduction to Robotics and Automation,

Thesis: Development of an Autonomous Drone System for Surveillance and Package Delivery Applications.

PROFESSIONAL EXPERIENCE

[01/2022 - Present] Machine Learning Intern

National Center for Artificial Intelligence and Robotics, Abuja, Nigeria.

- Implemented a convolutional neural network to detect the presence or absence of diabetic retinopathy from 85,110 preprocessed fundus images
 - Data cleaning and augmentation were performed on 85 GB of data saved in paperspace gradient storage, and an image classifier was trained on 85,110 image data.
 - The algorithm had a specificity of 96.52% and a sensitivity of 93.41% when tested on 21,276 fundus images.
- Developed a state-of-the-art chest X-ray classifier by retraining a DenseNet model on 108,948 frontal-view X-ray images of 32,717 unique patients.
 - Performed data exploration and image processing on all 108,948 X-ray images and eliminated patients with multiple records that appeared in both training and test datasets in order to prevent data leakage.
 - Measured the diagnostic performance by computing the AUC (Area Under the Curve) for the ROC (Receiver Operating Characteristic) curve and visualized the model activity using GradCAMs
- Built a 3D U-Net model for brain tumor auto-segmentation from 484 3D magnetic resonance imaging (MRI) scans
 - Executed data exploration on 9GB of 3D MRI scans and created an interactive visualization across the layers of the images
 - Applied the soft dice loss function for training the U-Net model, which was evaluated with a specificity of 99.60% and a sensitivity of 78.91%.

[06/2021 - 09/2021] Research Assistant

Robotics and Artificial Intelligence Nigeria, Ibadan, Nigeria.

• Trained 9 robotics enthusiasts on the internet of things and supervised the development of a cloud based home automation system and a smart irrigation system.

PROFESSIONAL DEVELOPMENT AND TRAININGS

[07/2022 - 08/2022]	Machine Learning Specialization - Stanford University DeepLearning.Al. Certificate
[02/2022 - 03/2022]	AI for Medical Diagnosis - Coursera DeepLearning.AI. Certificate
[08/2021 - 01/2022]	Practical Deep Learning For Coders - FastAI. Link
[09/2021 - 12/2021]	Applied Data Science - WorldQuant University. Certificate
[04/2019 - 07/2019]	Python 3 Programming: Beginner To Pro Masterclass - Udemy. Certificate

PROJECTS

$\overline{[02/2022 - 04/2022]}$	Diabetic Retinopathy Diagnostic System. Project Demo GitHub Link
[02/2022 - 02/2022]	Chest X-Ray Medical Diagnosis with Deep Learning. GitHub Link
[02/2022 - 02/2022]	Brain Tumor Auto-Segmentation for Magnetic Resonance Imaging (MRI). GitHub Link

LEADERSHIP EXPERIENCE

[04/2022 - Present] **CEO & Co-founder**

FundusAI, Abuja, Nigeria.

- Collaborated with the product development team to come up with a product based on our users.
- Built the company's vision board and shared it with the executive leadership team.
- Created the pitch deck to be used to pitch to potential investors at GITEX Dubai.

[02/2022 - 04/2022] Project Team Lead

National Center for Artificial Intelligence and Robotics, Abuja, Nigeria.

• Led a team of 4 interns in building a machine learning model for diabetic retinopathy detection to help prevent blindness in diabetic patients.

[01/2020 - 05/2021] Project Team Lead

Computer Engineering, University of Ilorin, Ilorin, Nigeria.

• Led a team of 7 in an undergraduate research project focused on the design and development of an autonomous drone system for surveillance and package delivery.

AWARDS AND HONORS

[08/2021]	Best graduating student, Department of Computer Engineering, University of Ilorin.
[08/2021]	First class honours award in Computer Engineering, University of Ilorin.
[08/2016 - 08/2021]	Undergraduate scholarship award for the best student in Computer Engineering.

SKILLS

Technical Skills: Machine learning, Deep Learning, Tensorflow, Keras, Pytorch, FastAI, Scikit-learn, Python, Scipy, Numpy, Pandas, Matplotlib, Seaborn, Embedded System Designs, RaspberryPi Programming, Arduino Programming, Internet of Things.

Soft Skills: Team Leadership, Independence of Thought, Civic Mindset, Innovative Thinking

VOLUNTEER EXPERIENCE

[04/2022 - 04/2022]	Volunteered during the national environmental sanitation in Abuja, Nigeria.
[05/2018 - 01/2021]	Organized tutorials for my classmates, which helped them achieve academic success.

PROFESSIONAL AFFILIATIONS

[2022 - Present]	Black in AI Community [Member]
[2022 - Present]	AI for Good Community [Member]
[2022 - Present]	DeepLearning.AI Community [Member]
[2021 - Present]	Data Science Nigeria Community [Member]