

ABDULMALIK ADEYEMO

abdulmalikadeyemo@outlook.com | [LinkedIn](#) | +2348108273624 | [Personal Website](#)

EDUCATION

B.Eng Computer Engineering

[08/2015 – 08/2021]

University of Ilorin, Ilorin, Nigeria [website](#)

GPA: 4.68/5.0

Relevant Courses (Grades): Artificial Intelligence and Applications (A), Software Engineering (A), Software Development Techniques (A), Engineering Mathematics II (A), Control Theory (A), Fuzzy Logic and Programming (A), Introduction to Robotics and Automation (A), Computer Security Techniques (A), Computer Organization & Architecture (A).

WORK EXPERIENCE

Machine Learning Intern

[01/2022 – 10/2022]

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. [Link](#)
 - 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. [Link](#)
 - 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. [Link](#)
 - 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%.
- Taught 12 interns in the implementation of python for artificial intelligence.

Data Science Intern

[07/2022 – 10/2022]

Hamoye AI, Remote

- Spearheaded a team of 20 interns in the development, evaluation, and deployment of a dementia prediction model based on a tabular dataset of 150 subjects aged 60 to 96, with a 91% accuracy. [Link](#)
- Built a multi-label images classifier for satellite image chips with atmospheric conditions and various classes of land cover/land use using tensorflow, with an f2_score of 90%. [Link](#)

Graduate Teaching Assistant

[06/2021 – 09/2021]

Robotics and Artificial Intelligence Nigeria, Ibadan, Nigeria

- Trained 9 interns on the internet of things using Arduino and ESP8266 micro controllers.
- Supervised 9 interns on the development of a cloud based home automation system and a smart irrigation system.

Undergraduate Research Assistant
Computer Engineering, University of Ilorin, Ilorin, Nigeria.
Supervisor: Dr Aye Ajiboye

[10/2019 – 05/2021]

Undergraduate Thesis: Design and Development of a Semi-Autonomous Drone System.

- Wrote a research proposal, reviewed literature, and reported findings on a semi-autonomous drone system for security surveillance and package delivery.
- Wrote and submitted the mathematical analysis of the drone design for a thrust-to-weight ratio of 2:1.
- Led a team of 7 students in the design and development of a semi-autonomous drone system for surveillance, security and package delivery.

Undergraduate Intern
Sheraton Abuja Hotel, Abuja, Nigeria.

[04/2019 – 10/2019]

- Conducted Consistent Analysis of Computer Systems to Determine if existing Components Meet the Hotel's Need and Perform Upgrades as Needed.
- Installed, Managed and Conducted Updates on Security Systems to help Detect and Prevent Virus Attacks on the Hotel's Computer Systems.

Undergraduate Intern
RetailPoint Solutions LTD, Abuja, Nigeria.

[08/2018 – 11/2018]

- Programmed and Installed Point of Sales Systems in over 10 Business Hubs which Led to a 90% Increase in Operational Efficiency.

PROFESSIONAL DEVELOPMENT AND CERTIFICATIONS

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

CONFERENCES AND PRESENTATIONS

- Department of Surgery, University of Ilorin research day on “Emerging Technologies in Surgery, Implication for Training and Practice in Resource Poor Settings”, A 4 minute presentation by **Abdulmalik Adeyemo**, on “Automated Diagnosis Of Diabetic Retinopathy From Fundus Images Using Artificial Intelligence” [7/10/2022]
- Exhibitor at Digital Nigeria Conference on “Digital Transformation: A path to sustainable digital economy”
- Deep Learning IndabaX conference on “Responsible AI in National Security and Healthcare”.
- Abdulmalik Adeyemo (2021): Design and Development of a Semi-Autonomous Drone System. A B.Eng undergraduate research project, submitted to the department of Computer Engineering, University of Ilorin, Ilorin, Nigeria.

LEADERSHIP EXPERIENCE

CEO and Co-founder
FundusAI, Abuja, Nigeria

[04/2022 – Present]

- Created and presented the company's pitch deck during the iHatch startup incubation interview, which resulted in the company being selected as one of the top 6 out of over 1000 interviewed startups.
- Represented the company in pitching the solution during the CWG-PLC pitch for transformation challenge and was awarded 1st runner-up out of 100+ contestants.
- Collaborating with the Chief Technology Officer to develop a diagnostic device for capturing fundus images.

AWARDS AND SCHOLARSHIP

Best intern award for the stage B data science track, Hamoye AI.	[09/2022]
Best graduating student, Department of Computer Engineering, University of Ilorin.	[08/2021]
First class honors award in Computer Engineering, University of Ilorin.	[08/2021]
Undergraduate scholarship award for the best student in Computer Engineering.	[2016 – 2021]

VOLUNTEERING EXPERIENCE

Artificial Intelligence Tutor [08/2022 – 09/2022]

NITDA STEM BOOT CAMP FOR KIDS, Abuja, Nigeria

- Tutored 156 kids aged 12 to 16 on how to build a facial recognition system using artificial intelligence

Lead Tutor [02/2018 – 07/2021]

LearnWithMKTV, Ilorin, Nigeria

- Organized and tutored 20 classmates on difficult subjects, which helped them achieve academic success.
- Coached over 150 students on how to achieve academic success while maintaining a healthy social life.

PROFESSIONAL AFFILIATIONS

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

SKILLS

Libraries and Frameworks: Tensorflow, Keras, Pytorch, FastAI, Python, Scikit-learn, Pandas, Numpy, Matplotlib, Seaborn.

Laboratory: 3D Printer, CNC Machine, Laser Cutting machine, Soldering Iron, Raspberry Pi, Arduino, ESPs.

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

Languages: English (Bilingual Proficiency), Yoruba (Bilingual Proficiency).