

# DADA IBIDAPO DARE

E-MAIL: [dman4computer@gmail.com](mailto:dman4computer@gmail.com), [ibidapo.dada@covenantuniversity.edu.ng](mailto:ibidapo.dada@covenantuniversity.edu.ng)

ADDRESS: 5, Salako Street, Mushin, Lagos State.

PHONE NUMBER: +234-9033036122

## PERSONAL PROFILE

---

I am a Passionate and experienced professional with expertise in Artificial Intelligence and various areas of software development, including software engineering, machine learning, deep learning engineering, Python development, natural language processing, computer vision engineering, and full-stack development with Django and React. I specialize in building intelligent systems, from full-stack applications to machine learning solutions that address complex, real-world problems. My work spans research and industry applications, focusing on advanced areas like computer vision, Natural language processing, and deep learning. I'm driven by a passion for innovation and continuously strive to develop efficient, impactful solutions in technology. Also, I am a Lecturer at Covenant University, currently pursuing a Ph.D. in Computer Science.

## ACADEMIC QUALIFICATIONS

---

❖ <b>Doctor of Philosophy</b> (Ph.D. Computer Science) Federal University of Agriculture, Abeokuta	In view
❖ <b>Masters of Science</b> (Computer Science) Federal University of Agriculture, Abeokuta	2021
❖ <b>Bachelor of Science</b> (Computer Science) Federal University of Agriculture, Abeokuta	2017
❖ <b>N.C.E</b> in Computer Science and Mathematics Education Federal College of Education, Abeokuta	2011

## WORK EXPERIENCE

---

### 2022-Present

### Lecturer at Covenant University Otta

Department of Computer and Information Sciences

Duties Performed:

- Algorithm & Complexity Analysis
- Computer Programming
- Concept of Programming Languages
- Fundamentals of Data Structure
- Object Oriented Programming
- Discrete Structure
- Introduction to Problem-Solving

### 2023-Present

### AlgorithmX Research and Learning Institute, Otta

Machine Learning Engineer and Full-stack Developer (Django and React)

Duties Performed:

- Designed and implemented deep learning models using TensorFlow and PyTorch to solve complex problems in computer vision and natural language processing.
- Conducted experiments and optimized neural network architectures for improved performance and efficiency.

- Collaborated with cross-functional teams to integrate machine learning solutions into existing software applications.
- Developed and maintained web applications using Django and React, ensuring high performance and scalability.
- Implemented RESTful APIs for seamless communication between frontend and backend systems.
- Managed database operations using PostgreSQL and MongoDB, including data modeling and query optimization.

**2022- 2024**

**SmartSoil Project, FUNAAB**

Data Scientist

**Project Titled:** “Digital Soil Mapping for Optimal Agricultural Yield and Sustainable Soil Biodiversity Management in Southwest Nigeria Using Artificial Intelligence”

**2018-2021**

**Foursquare International Secondary School,  
Abeokuta**

Programmer/Teacher

Duties Performed:

- Teaches Computer programming (Python)/ Data processing.
- Design the school result application using HTML, CSS, Bootstrap, jQuery, MySql, and PHP.
- Designing and modeling the school database.

## PROJECTS

---

### ❖ PsychGen Africa

**Description:** The Psychiatric Genomics Africa Portal is a pioneering initiative from the PGCAfrica working group, designed to serve as a centralized platform for psychiatric genomics research focused on the African population. By establishing a unified metadata repository, PsychGenAfrica enables researchers, healthcare professionals, and the public to access vital information and explore groundbreaking research in neuropsychiatric disorders across Africa.

**Tools and Technologies:** Next.js, Django, PostgreSQL, D3.js, and Chart.js.

#### **Responsibilities:**

- To provide open and equitable access to African psychiatric genomics metadata.
- To offer an intuitive platform for real-time research analysis and data visualization

**Website:** <https://psy-sandy.vercel.app>,

### ❖ Machine Learning Project: Phishing Detection Chrome Extension

**Description:** Developed a Chrome extension to detect phishing websites using machine learning models. The extension analyzes URLs and predicts their legitimacy using Random Forest and SVM models, enhancing user security while browsing.

#### **Tools and Technologies:**

Python, Scikit-learn, Django REST Framework, Requests, BeautifulSoup, HTML, CSS, JavaScript, Chrome Extension API

#### **Responsibilities:**

- Conducted data preprocessing, including feature extraction from URLs.
- Implemented and trained Random Forest and SVM models for phishing detection.

#### **Achievements:**

- Successfully trained and deployed machine learning models with high accuracy for phishing detection.
- Created a seamless integration between the Chrome extension and the backend API for real-time URL analysis.

**Project Link:** [GitHub - dadaibidapo/phishing\\_detector](https://github.com/dadaibidapo/phishing_detector)

#### ❖ Sales Management System (Django Web Application)

**Description:** Developed a sales management system using Django framework to facilitate the tracking and management of sales transactions. Integrated user authentication and profile management for secure access.

**Responsibilities:**

- Designed and implemented Django models for storing sales data, including customers, products, and sales transactions.
- Developed views and templates for listing, viewing, and editing sales data, including customer information and product details.

**Technologies Used:** Django, Python, HTML, CSS, JavaScript, PostgreSQL (Database), Pandas, Matplotlib (Data Analysis and Visualization), xhtml2pdf (PDF Generation), Git (Version Control)

**Project Link:** <https://github.com/dadaibidapo/Sales-Management-System.git>

#### ❖ Machine Learning Project: Salary Prediction for Software Developers

**Description:** Developed a machine learning model to predict the salary of software developers based on various factors such as country, education level, and years of experience. The model was trained using a deep neural network algorithm and deployed using Django for web-based interaction.

**Tools and Technologies:** Python, PyTorch, NumPy, Django, Google Colab, HTML, CSS, JavaScript,

**Responsibilities:**

- Conducted data preprocessing, including feature scaling and normalization.
- Implemented a linear regression model using PyTorch for salary prediction.

**Achievements:**

- Successfully trained a machine learning model with high accuracy for salary prediction.
- Developed a user-friendly web interface for interacting with the model, improving accessibility.

**Project Link:** [https://github.com/dadaibidapo/Salary\\_Prediction-git](https://github.com/dadaibidapo/Salary_Prediction-git)

#### ❖ Computer Vision Project: Image Classification with TinyVGG

**Description:** Implemented an image classification project using PyTorch and a modified version of the TinyVGG architecture. The goal was to classify images of various objects into predefined categories. The project involved data preprocessing, model construction, training, evaluation, and inference on custom images.

**Key Contributions:**

- Created data preprocessing pipelines using PyTorch `transforms` for resizing and augmentation.
- Developed a TinyVGG model architecture following the CNN Explainer website's specifications.

**Technologies Used:** Python, PyTorch, Matplotlib, torchvision

**Achievements:**

- Achieved significant improvement in model performance by incorporating data augmentation techniques.
- Successfully deployed the model to make predictions on custom images, demonstrating its real-world applicability.

**Outcome:** The project provided valuable insights into computer vision techniques and deep learning model development. It showcased proficiency in PyTorch, data preprocessing, model training, and evaluation, as well as the ability to communicate results effectively through visualization and documentation.

**Project Link:** [https://github.com/dadaibidapo/vision\\_dataset.git](https://github.com/dadaibidapo/vision_dataset.git)

#### ❖ Sequence-to-Sequence Attention Model for Machine Translation

**Description:** Developed a sequence-to-sequence (seq2seq) model with attention mechanisms for translating Spanish sentences to English. The project utilized TensorFlow and implemented two types of attention: dot-product attention and Bahdanau attention. The model was trained and evaluated on a dataset of Spanish-English sentence pairs, achieving accurate translations.

**Technologies Used:** TensorFlow, Python, Matplotlib, scikit-learn

**Achievements:**

- Successfully implemented a seq2seq model with attention mechanisms for machine translation, showcasing expertise in deep learning and natural language processing.
- Explored different attention mechanisms and their impact on translation quality, demonstrating adaptability and experimentation skills.

**Project Link:** [https://github.com/dadaibidapo/seq2seq\\_attention\\_model.git](https://github.com/dadaibidapo/seq2seq_attention_model.git)

❖ **Project Title: Fake News Detection using Deep Learning Models**

**Project Description:**

- Developed a fake news detection system using various deep learning models including Simple Neural Network (SNN), Convolutional Neural Network (CNN), Recurrent Neural Network (LSTM), LSTM-CNN, OPCNN (CNN with max pooling), and LSTM-OPCNN.

- Utilized a dataset containing statements labeled as either "TRUE" or "Fake" to train and evaluate the models.

**Technologies Used:** Python, TensorFlow, Keras, Pandas, NumPy, Matplotlib, NLTK (Natural Language Toolkit)

## SKILLS AND COMPETENCIES

---

❖ **Programming Languages:**

Python  
Javascript  
C#  
C  
C++  
Java

❖ **Frameworks and Libraries:**

Machine Learning: PyTorch, TensorFlow, Sklearn  
Web Development: Django, React, HTML, CSS, Bootstrap, Tailwind, RESTful APIs  
Natural Language Processing: NLTK, spaCy, Gensim  
Computer Vision: OpenCV  
Other: Pandas, Numpy, Matplotlib, Folium.

❖ **Machine Learning:**

Supervised and Unsupervised learning  
Neural networks  
Convolutional neural networks (CNNs)  
Recurrent neural networks  
Transformer models  
Computer Vision  
Natural language processing.

❖ **Software Engineering:**

Full-Stack web development  
Software architecture

❖ **Tools:**

VS code  
Git  
Jupyter  
Google collab  
Docker

❖ **Databases:**

MySQL  
PostgreSQL  
SQLite

❖ **Advanced problem-solving and numeracy skills**

❖ **Creative thinking**

## PUBLICATIONS

---

- ❖ **Dada Ibidapo Dare**, Akinwale Adio Taofiki, Onashoga Adebukola S., Osinuga Idowu A. “An improved gradient descent method for optimization of supervised machine learning problems.” *International Journal of Computer Applications* (0975 – 8887) Volume 183-No. 20, pg 39-45, August 2021.
- ❖ **Dada Ibidapo Dare**, Akinwale Adio Taofiki, Onashoga Adebukola S., Osinuga Idowu A. “Optimization of Deep Learning Model Using An Improved Three-Term Conjugate Gradient Algorithm” *Soft Computing Journal* (under review).
- ❖ **Dada Ibidapo Dare**, Akinwale Adio Taofiki, Onashoga Adebukola S., Osinuga Idowu A. “Comparison of different learning rates on logistic regression using FR conjugate gradient optimizer.” *2021 Conference Proceedings of the Royal Statistical Society Nigeria Local Group*. Volume 2, pg 93-100.
- ❖ Ogunyinka, T. K., **Dada I. D.**, Oni, O. O.& Ayemowa, M. O(2021). “A robust prediction model for candidate’s admission using fletcher-reeves (FR) conjugate gradient method.” *Federal Polytechnic Ilaro-Journal of Pure and Applied Sciences (FEPI-JOPAS)* Volume 3(1), pg 22-31, June 2021.

## RESEARCH INTEREST

---

- ❖ Optimization Algorithms and Theory
- ❖ Natural Language Processing
- ❖ Machine learning/Deep learning/Transformer

## LANGUAGES

---

- ❖ English (Fluent)
- ❖ Yoruba

## REFERENCES

---

- ❖ On Request