Yusuf Hassan

16, Anefi Street, Iyekhei Quarters,
Auchi, Edo State, Nigeria.

✉ hassanyus581@gmail.com
☎ 08030795224, 09062119593

PROFILE SUMMARY

A motivated early-career Data Scientist passionate about harnessing Artificial Intelligence to drive scientific breakthroughs. With expertise in data analysis, machine learning, deep learning and computer vision, I am eager to apply AI to solve complex scientific challenges and uncover transformative insights. Dedicated to advancing my knowledge in AI-driven research, I strive to contribute to innovative solutions addressing critical scientific and societal issues while continuously refining my technical and analytical capabilities.

CORE SKILLS

- **Database Management:** Proficient in extracting data from SQL and No-SQL databases for analysis and modeling.
- **Scientific Data Analysis:** Experienced in working with large datasets from scientific domains such as climate and healthcare.
- **Predictive Modeling:** Proficient in regression, classification, and clustering techniques tailored to scientific applications.
- **Machine Learning:** Hands-on expertise with frameworks like TensorFlow and PyTorch for implementing cutting-edge AI models.
- **Data Visualization:** Skilled in creating informative visualizations using Python libraries like Matplotlib, Seaborn, and Plotly.
- **High-Performance Computing:** Knowledge of parallel processing techniques and working in Linux environments.
- **Ethics in AI:** Understanding of ethical considerations and implications of deploying AI solutions in scientific and societal contexts.

PROFESSIONAL TRAININGS AND CERTIFICATIONS

WORLDQUANT UNIVERSITY – New Orleans, LA, United States
Applied AI Lab: Deep Learning for Computer Vision   *February, 2025 – Present*

WORLDQUANT UNIVERSITY – New Orleans, LA, United States
Applied Data Science Lab   *October, 2024 – February, 2025*

DATACAMP – New York, United States
Professional Data Scientist   *April, 2024 – October, 2024*

DATACAMP – New York, United States
Associate Data Scientist   *April, 2024 – October, 2024*

WORK EXPERIENCE

Machine Learning Intern
Zummit Africa Limited | 26a Roedean Close, Cadogan Estate, Lekki, Lagos
November, 2024 – March, 2025

- Collaborated with the core tech team to build AI/ML solutions for Datarango.
- Partnered with product managers and software developers to translate requirements into ML solutions.
- Conducted research with the AI curriculum manager to develop useful learning content for Datarango.
- Maintained and monitored production models, ensuring performance and integration with CI/CD pipelines.
- Engaged in monthly research-focused AI projects with fellow interns.
- Contributed to the development of tools and frameworks supporting efficient ML workflows and automation.
- Followed a structured learning path and documented progress on GitHub.

Python Data Analyst Intern

Amdor Analytics | Remote

November 2024 – December 2024

- Analyzed and processed large datasets to derive actionable insights using Python libraries such as Pandas, NumPy, Seaborn and Matplotlib.
- Conducted exploratory data analysis (EDA) to identify trends and patterns, aiding in business decision-making.
- Collaborated with cross-functional teams to deliver data-driven solutions and visualizations for client projects.
- Demonstrated problem-solving skills by addressing and resolving real-world analytics challenges

EDUCATION & QUALIFICATION

BAZE UNIVERSITY – Abuja, Nigeria
Professional Diploma in Artificial Intelligence   *March 2024 – Present*

NATIONAL OPEN UNIVERSITY OF NIGERIA (NOUN) – Abuja, Nigeria
Postgraduate Diploma in Education (PGDE)   *January 2023 – April 2025*

AUCHI POLYTECHNIC – Auchi, Edo State, Nigeria
Higher National Diploma (HND), Civil Engineering Technology   *November 2012 – October 2014*

AUCHI POLYTECHNIC – Auchi, Edo State, Nigeria
National Diploma (ND), Civil Engineering Technology   *November 2009 – October 2011*

PROJECTS

Deep Learning & Computer Vision Projects

- **Image-based Product Recommendation System:** Developed and deployed Fashion product recommendation system using TensorFlow and Streamlit to recommend fashion products for ecommerce system.
- **Wildlife Image Classification:** Developed a CNN using PyTorch to classify animal species from camera trap images, contributing to wildlife conservation.
- **Crop Disease Detection (Uganda):** Built a CNN-based model for classifying crop diseases, leveraging transfer learning and k-fold cross-validation, supporting precision agriculture.

Machine Learning & Data Science Projects

- **Housing Market Analysis (Mexico):** Analyzed 21,000 property listings to determine whether location or property size has a greater impact on pricing, using data visualization and correlation analysis.
- **Apartment Price Prediction (Buenos Aires):** Developed a linear regression model to estimate apartment prices, implementing a machine learning pipeline with feature encoding and imputation.
- **Air Quality Forecasting (Nairobi):** Built an ARMA time-series model to predict particulate matter levels, utilizing data from MongoDB and optimizing autoregression models.
- **Earthquake Damage Classification (Nepal):** Implemented logistic regression and decision tree models to predict structural damage, extracting and processing data from an SQL database.
- **Bankruptcy Prediction (Poland):** Built random forest and gradient boosting models to predict financial risk, handling imbalanced data with resampling techniques and evaluating models using precision-recall metrics.
- **Customer Segmentation (United States):** Applied k-means clustering and PCA to segment consumers into groups, designing and deploying a Dash web application for interactive insights.
- **A/B Testing (WorldQuant University):** Conducted a chi-square test to assess email effectiveness in program enrollment, developing a three-tiered interactive web application.
- **Volatility Forecasting (India):** Developed a GARCH time-series model to predict asset volatility, integrating data from a web API and deploying predictions via a custom-built server.

TEACHING EXPERIENCE

Edo State Universal Basic Education Board (EDO-SUBEB) – Benin, Edo State, Nigeria
Mathematics Teacher *(Akpekpe Secondary School)*
March 2022 – Present
- Planned and implemented educational activities and events to enhance student engagement.
- Organized instructional materials to support interactive and effective lessons.
- Ensured a safe and productive learning environment for all students.
- Prepared periodic reports and termly report cards.
- Evaluated and documented student progress regularly.
- Attended and organized parent-teacher conferences and open days.

Hira Comprehensive College – Iyakpi South, Ibie, Edo State, Nigeria
Science Teacher
August 2018 – January 2022
- Designed and utilized lesson plans aligned with the school curriculum.
- Managed class teaching, test preparation, and examination question development.
- Implemented instructional strategies to improve student comprehension and engagement.
- Encouraged critical thinking and discussion among students using effective teaching techniques.
- Observed and provided feedback to address student learning challenges.

VOLUNTEER EXPERIENCE

Data Scientist
CareerEx Incubation Program – Remote
June 2024 – August 2024
- Collaborated with a diverse, cross-functional team comprising professionals in data science, cybersecurity, front-end and back-end development, product design, and product management.
- Contributed to the design and development of **Bravo Academy**, an edtech product aimed at enhancing digital education accessibility for learners.
- Applied advanced data science techniques, including data analysis and predictive modeling, to improve platform functionality and user experience.
- Participated in brainstorming sessions and product presentations to refine and communicate innovative features.

PROFESSIONAL DEVELOPMENT/CONFERENCES

The Bluechip Data and AI Summit 2024
Participant | Eko Hotel, Victoria Island, Lagos, Nigeria | December 2, 2024
- Focused on data-driven and AI solutions for a future-ready Africa.
- Engaged with industry experts to explore innovative AI applications for solving real-world challenges in Africa.

Open Data Science Conference Europe (ODSC)
Participant | Virtual Event | September 5–6, 2024
- Attended sessions on AI, machine learning, and data science techniques.
- Gained hands-on experience with cutting-edge tools such as TensorFlow, PyTorch, and advanced data visualization libraries.
- Developed insights into AI's applications in scientific research and real-world problem-solving.
- Connected with a global community of data science prjhofessionals and researchers

HOBBIES AND INTERESTS

- Coding Challenges & Hackathon
- AI Research & Blogging

- Open-Source Contributions
- Reading Scientific Journals & AI Papers