# **Arthur Uzoma**

■ uzomaartur@gmail.com □ +234 803 579 1288 ■ zaratti.github.io

#### **SUMMARY**

Data scientist/Machine Learning Engineer efficient in generative modeling, classification, prediction and data processing with proven organizational, technical and communication skills.

## **EDUCATION**

## **Bachelor of Science in Computer science**

University of the People • Pasadena, California • 2021 • 3.84

• Received Dean commendation letters for dedication and hard work in pursuing academic excellence.

## **Networking and Hardware maintenance**

Minor in Network system monitoring and analysis. • Rivers State ICT Center (ICT center) • Rivers State • 2019

## West African Secondary Schools Certificate Examination (WASSCE)

Paradise International Group of Schools • St Andrew Street, Rumuobiakani, PortHarcourt • 2006

• Best academic performing student in the final exams of my set with one A, three B's, and four C's. Also, I achieved second place for my school representing her in the regional Ecobank National Essay writing competition.

#### **EXPERIENCE**

#### A.I/Machine Learning Engineer

#### **Renaissance Innovation Labs**

#### September 2024 - Present, Port-Harcourt.

- Developed and deployed a machine learning model, decoding handwriting scribbles to increase predictive accuracy by 35%, utilizing easyOCR library and Python, while collaborating with interdisciplinary teams to innovate solutions from ideation to business formation.[The repository is located here: https://github.com/Zaratti/RenaissanceInnovationLabs\_MachineLearning-Task1].
- Created an API accepting natural language queries, processes the queries using NLP models, generates SQL queries, runs on a connected database, and returns results in different formats, such as text, charts, or tables. Hosted as an demo app(https://nlqtosqlapp.streamlit.app/) on streamlit, enhancing processes to be downloaded and shared as CSV or JSON file for tech solutions.
- Created a career roadmap application that helps users identify and acquire skills needed for employment. The user inputs a desired career goal, and either or not, submits a resume(in docx/pdf format), the application A.I reads the skill and experience section of the resume, looking for transferable skills and experience relevant to the submitted career goal, generates a personalized study route, and quiz test of knowledge to ascertain the level of the user preparedness and fit for the submitted career goal/position.[The repository is located here: https://github.com/Zaratti/CareerPath].

#### **Data science Intern**

## Hamoye AI

#### March 2024 - August 2024, Virtual

• Using machine learning techniques as an invaluable tool for cleaning, wrangling, writing of python queries for modeling and interesting visualizations on provided datasets.

- Engineered predictive models by utilizing Python libraries such as NumPy, pandas, and scikit-learn, achieving a 15% increase in model accuracy through iterative optimization and validation processes in Forecasting Antimalarial Drug Needs.[The repository is located here: https://github.com/Zaratti/JenkinsPremierProject].
- Developed predictive models using Python and ensemble learning models, achieving 85% accuracy in forecasting outcomes across multiple datasets and enhancing algorithmic efficiency in predicting electricity demand and supply gaps: SubSaharan Africa vs Other continent regions.[The repository is located here: https://github.com/Zaratti/BigGAN-Capstone-Project-Deliverables].

## **Product Management Intern**

#### **DevCareer Tech**

July 2023 - May 2024, Virtual

- Coordinated cross-functional teams in developing a user-centric product strategy, resulting in a 25% increase in user engagement metrics across pilot programs within the African tech ecosystem.
- Launched a mentorship program supporting over 200 aspiring product managers across Africa, utilizing feedback loops and best practices to achieve a 90% satisfaction rate and promote sustained growth within the tech ecosystem.
- Conducted market research using Google Analytics and customer survey tools, identifying key product features increasing user engagement by 25% within three months.

#### **Online tutor**

#### **D-lighter Tutor**

January 2024 - February 2024, Virtually(Online)

- Organized and delivered exceptional learning experiences for learners online.
- Utilized experience and commitment to contribute significantly to D-lighter educational goals and student success.

#### **Human Resource Intern**

#### **Gao Group of Companies**

September 2023 - December 2023

• Participated in a team to organize conferences/meetings, agenda preparation and events coordination.

#### **Presiding Officer**

#### **Independent National Electoral Commission**

September 2022 - April 2023, Nwangele, Imo State

- Received and inspected all materials and the Bimodal Voter Accreditation System equipment for election and ensured the security, particularly the sensitive materials, such as the BVAS machine, ballot papers and result forms.
- Coordinated activities in the assigned polling unit under supervision including polling, sorting, counting of votes and the announcement of election results at the polling booth.
- Managed a team of election assistant officials to facilitate smooth execution of voting processes, ensuring compliance with electoral guidelines in vote tallying and results reporting.

## Ward Superintendent(IMO STATE COMMAND)

**National Commission against the Proliferation of Small Arms** 

June 2021 - July 2022, Orlu zone, Nigeria

- Administered state agents invite-only social media group used for information sharing and release.
- Maintained electronic profiles of about one thousand, five hundred and eighty recruited state agents.

#### **Networking and Hardware Maintenance Assistant Instructor**

#### **Rivers state ICT center**

February 2021 - May 2021, Rumuomasi, Rivers state

- Delivered lectures on privacy and security standards for a class of 20 students, as a teaching assistant, and improved student pass rates by 20%.
- Coordinated four orientation sessions for 15 20 new Codegaminators program cohorts at Tech Creek(Rivers State ICT).
- Troubleshot and resolved issues regarding LAN's and WAN's, including performance and connectivity problems.

• Assisted with recommending, scheduling and implementing system hardware maintenance and/or software upgrades.

## **Networking and Hardware Maintenance Intern**

## **Olotu Square Hub & Tech**

#### July 2020 - January 2021, Dline, PortHarcourt, Nigeria

- Ensured 18 fellow interns acquired knowledge of the tech stack by planning lessons, resulting in the interns delivering on a set of requirements.
- Investigated the study of encryption standards in networking devices such as routers, repeaters, and switches.
- Implemented a 2-hour long course on networking covering basic network architectures, TCP/IP, OSI model and wireless technologies. Delivered the course to 18 fellow interns.

## **Software Development & Design Intern**

#### PrimedSoft Limited

## January 2019 - July 2019, East-West road, PortHarcourt, Nigeria

- Spearheaded a front-end development team by improving the development team's performance, from 20 bugs/month to 3 bugs/month, enabling the team to win the best development unit award.
- Created and deployed more than 20 responsive and mobile-friendly web pages using technologies such as HTML, CSS, JavaScript, and SQL for a web application.
- Responsive development lead of an online poll and vote management system PrimedPoll, with the results of the simulation used to inform the campaign of potential election outcomes and voting trends(https://polledapp-9fa3c.firebaseapp.com/).

## **Utility officer**

## Catering and Facilities Solution(CFS) Nigeria

## August 2014 - February 2015, PortHarcourt, Nigeria.

- Complied with safety and health regulations by conducting daily safety meetings, eliminating trip hazards, and performing regular safety checks and inspections.
- During a land survival at sea (SAS) training test, volunteered to be a section leader to lead a team of 12 persons through an obstacle course.

#### **Kitchen Head Assistant**

#### Kilimanjaro restaurant

#### August 2013 - July 2014, YKC, Woji, Rivers state

- Enabled the branch unit achieve sales target by preparing and packaging meals for businesses, and catering external customers with sizes of 150 -200.
- Organizing food supplies and ingredients, Assisting the chef and taking directions.
- Washing utensils, pots, pans, and chopping boards.

#### **PROJECTS**

# Using generative A.I to predict electricity demand and supply gaps: SubSaharan Africa vs Other continent regions

Hamoye A.I • github.com/Zaratti/BigGAN-Capstone-Project-Deliverables • June 2024 - August 2024

- Utilized natural language processing (NLP) techniques to extract relevant information from energy reports and other data sources related to electricity demand and supply in Sub-Saharan Africa and other regions.
- Leveraged generative adversarial networks (GANs) to generate synthetic data for regions with limited historical data, enabling more comprehensive analysis and prediction.
- Employed deep learning models, such as feed-forwarding neural networks (FNNs) and long short-term memory (LSTM) networks, to analyze patterns and forecast electricity demand and supply gaps based on factors, including

population growth, economic development, and energy sources to identifying areas requiring targeted investments or policy interventions.

## **Forecasting Antimalarial Drug Needs**

Hamoye A.I • github.com/Zaratti/JenkinsPremierProject • May 2024 - June 2024

- Utilized time series forecasting models, such as autoregressive integrated moving average (ARIMA) and Prophet, to analyze historical data on antimalarial drug consumption and predict future demand based on factors such as disease prevalence, population growth, and distribution patterns.
- Used data visualization tools, such as interactive maps, to present forecasts effectively, enabling stakeholders to identify potential shortages or oversupplies of antimalarial drugs in different regions and plan logistical and procurement strategies accordingly.
- Employed machine learning algorithms, such as random forests and gradient boosting, to identify key drivers of antimalarial drug demand and incorporate the findings into forecasting models, improving accuracy and accounting for regional variations.

## Tech Ethics - What is legal is not always ethical

Berkeley InfoCamp research paper publications/presentations • October 2022 - October 2022

- Led an online team of 2 members to present a tech policy paper at the InfoCamp 2022, a Social Good Hackathon organized by the School of Information.
- Co-lead of the an online team to present at the Ideathon and finished among the top three winners as the only virtual team at the InfoCamp 2022.
- Investigated real-world challenges related to the ethical implications of data and technology.

## **CERTIFICATIONS**

## **Product Management**

DevCareer Tech Program • 2024

- Structured learning and validates core skills needed for effective product management, such as market research, product strategy, roadmap development, and product lifecycle management.
- Facilitating networking opportunities with other professionals in the product management community, fostering knowledge sharing and potential career advancement.
- Learners are exposed to industry best practices, methodologies, and tools used in modern product management, which can enhance career prospects and keep their knowledge up-to-date.

## Linear Algebra

Codecademy • 2023

- Understanding the fundamental building blocks of linear algebra: vectors and matrices, their important operations, how to use both vectors and matrices to efficiently solve systems of linear equations, and how to use them to solve important problems.
- Using the Python library NumPy to programmatically perform linear algebra, and represent vectors and matrices as NumPy array.

## **Data Structures and Algorithms in Python**

Datacamp • 2023

• Familiarized myself with data structures like linked lists, stacks, queues and graphs to implement algorithms like Depth First Search, Breath First Search, Bubble sort, Quicksort, practicing that to decks of cards, music playlists and stacks of books, and coming to grips with "Big O Notation".

## **Responsive Web Design**

freeCodeCamp (https://www.freecodecamp.org/certification/zaraoma/responsive-web-design) • 2019

• The freeCodeCamp Responsive Web Design certificate demonstrates relevant, practical skills in developing responsive webpages that provide an optimal viewing experience across devices.

# **SKILLS**

Languages: Python, Git, Vim, C, HTML, CSS & JavaScript.

Hard Skills: Information Theory, Machine Learning,

Tools: Jupyter Notebook, NumPy, Matplotlib, SciPy, SkLearn, Pandas, Cable crimping, Configuration & setup of

Network environment.

Soft Skills: Presentation skills, Collaboration & Critical thinking.