Arthur Uzoma

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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.

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].

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/).

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.

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.