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OBJECTIVE

Pursuing a Data Science major at Carnegie Mellon University Africa has instilled in me a fervent passion for harnessing data-driven insights to solve complex issues. With strong English proficiency and meticulous research skills, I am keenly interested in applying my analytical abilities in diverse settings. My academic coursework and hands-on projects have prepared me to excel in challenging roles, demonstrating a commitment to achieving substantial outcomes in any project I undertake.

EDUCATION

Carnegie Mellon University Africa	Rwanda, Kigali
MSc Information Technology	August 2023- May 2025
<ul style="list-style-type: none">Relevant coursework: <i>Data Inference and Applied Machine learning, Data Structures and Algorithms, Data Analytics, Big Data Science etc.</i>Research work (Supervisor: Prof. Eric Umuhoza): <i>conducted research analyzing challenges and emerging trends in secure software development. Synthesized findings from 15+ contemporary papers.</i>	
Ashesi University	Berekuso, Ghana
BSc. Computer Science	August 2019 – June 2023
<ul style="list-style-type: none">Relevant Graduate Coursework: <i>Data Structures and Algorithm, Discrete Mathematics, Software Engineering, Machine Learning, Advanced Database, Algorithm and Design Analysis</i>Final Year Project (Supervisor: Dr. Dennis Asamoah): <i>Developed a voice-enabled software application that records sales transactions for small businesses. The system allows users to input sales data through voice commands, improving efficiency and accuracy. Implemented Python, speech recognition libraries, and a database for data storage.</i>	

ACHIEVEMENTS & AWARDS

Recipient, The Mastercard Foundation Scholarship Program Ashesi University	Sept 2019-June 2023
<ul style="list-style-type: none">Awarded a full merit-based scholarship from the Mastercard Foundation for my undergraduate education at Ashesi University	
Recipient, Smart Africa Scholarship Fund Carnegie Mellon University Africa	August 2023- May 2025
<ul style="list-style-type: none">Received a full merit scholarship from Smart Africa Foundation to fund my graduate studies.	

PROJECT EXPERIENCE

Voice Enabled Sales Recording System, Project Lead, Ashesi University (Python, NLP, MySQL)	August 2022-May 2023
<ul style="list-style-type: none">Collaborated with a colleague to design and implement a voice-enabled sales recording system.Conducted research on speech recognition technologies and integrated them into the application.Developed the user interface and database functionality, ensuring seamless data recording and retrieval.Tested and debugged the system to ensure optimal performance and user-friendliness.Presented the project to stakeholders and received positive feedback on its potential impact.	
Global Data Analysis and Visualization, Graduate Project Assignment Python, Pandas, Matplotlib	Sept 2023-Oct 2023
<ul style="list-style-type: none">Performed data analysis and visualization of global datasets, focusing on socio economic and environmental factors.Utilized python to create scatter plots examining relationships between GDPs per capita and malnutrition prevalence.Analyzed price trends of commodities like wheat, crude oil, and Gold.	

- Developed skills in data synchronization and time series analysis.

Dashboard Evaluation System Development, *Frontend Developer* | (PHP, JavaScript, HTML, CSS) Jan 2022-May 2022

- Built an interactive frontend of the Dashboard Evaluation System for the Ashesi Entrepreneurship Center
- Utilized PHP, JavaScript, HTML, and CSS to develop a user-friendly interface that allowed the center to generate reports, visualize data using graphs, charts, and tables, and share their data effectively.
- Collaborated with clients to understand their requirements and ensure the frontend design met their expectations and needs.
Collaborated with a cross-functional team, including backend developers and designers, to ensure seamless integration and a cohesive user experience.
- Participated in regular meetings and discussions with clients to gather feedback and refine the frontend design.

Statistical Analysis and Interpretation | Graduate Project Assignment (Python, SciPy, Pandas) Oct 2023-Present

- Conducted statistical analysis on diverse datasets, including energy intake in women, Guinness taste preferences, and UK housing market trends.
- Performed hypothesis testing, data interpretation, and time series analysis, utilizing Python, SciPy, Pandas
- Key achievements include mastering hypothesis testing techniques, interpreting complex data correlations, and identifying financial data trends.

Exploratory and Analytical Study on Wind Power Generation Dynamics | Graduate Assignment Feb 2024- Present

- Conducted exploratory analysis and time series forecasting on intraday onshore wind power generation data using python and pandas.
- Implemented data processing techniques, including datetime adjustments and handling missing values to enhance the datasets integrity for analysis.
- Applied statistical methods to investigate wind generation dynamics such as percentage change over time, variance ratio tests, and ARIMA modelling, revealing insights into seasonal patterns and predictability.
- Used Matplotlib for visual representation of wind generation variability, seasonality, and forecasting accuracy, highlighting the capability to derive business insights from complex datasets.

Virtual Health Companion App | Founder & Lead Developer (Python, Machine learning, Flutter) Feb 2024 -Present

- Initiating a cutting-edge project to develop a user-friendly platform aimed at the management of chronic conditions through end-to-end solutions. Leveraging AI to personalize patient care, the app aims to improve health care by facilitating better patient management and engagement.
- Responsible for conceptualizing the project idea, conducting market and user research to identify core needs and functionalities, and leading the development process using python for backend algorithms and flutter for a cross platform user experience.
- Engaging in continuous learning to apply the latest AI and ML technologies for predictive health analytics, aiming to deliver a transformative tool in the management of chronic health conditions.

RESEARCH EXPERIENCE

Coursework, Carnegie Mellon University Africa

Nov 2023 – Dec 2023

- Conducted academic research analyzing challenges and emerging trends in secure software development.
- Authored a 12-page report, synthesizing findings on topics like DevSecOps, automated analyzers, and blockchain verification.
- Demonstrated technical writing skills through literature review, citation of credible sources and discussion of real-world case studies.
- Displayed expertise in secure coding concepts including threat modelling, access controls and cryptographic techniques.

WORK EXPERIENCE

Data Analyst Intern, Ktech Hub & Technologies, Accra

May 2022 – Jul 2022

- Used Python, including popular libraries such as Pandas, Matplotlib, and the Quandl API, to analyze data and provide actionable insights to clients.
- Received supervision and gained valuable hands-on experience in data loading, organization, and data cleaning techniques.
- Specialized in analyzing diverse datasets from health, finance, and consumer behavior sectors, extracting meaningful insights to bolster data driven decision making for clients.

Library Assistant, Ashesi University, Berekuso

August 2020 – January 2022

- Assisted students in navigating library resources, including locating books, journals, and online databases.
- Conducted basic troubleshooting of copy machines and printers, ensuring they were functioning properly.
- Provided guidance on library services and policies, handling over 500+ inquiries, which contributed to a 20% improvement in student engagement with library resources.

LEADERSHIP AND EXTRA CURRICULAR ACTIVITIES

Code For All, Volunteer Tutor | Ashesi University

Sept 2021-May 2023

- Teach senior high school students the fundamentals of web development (HTML, CSS, and JavaScript) on weekends.
- Developed engaging learning materials and interactive exercises to enhance students' comprehension.

Ashesi Leo Club, Tamer

Sept 2019-May 2023

- Organize meetings venues and ensure meetings are conducted in the right manner.
- Take care of the display and storage of the club's property, flags etc.

Resource Center, Tutor | Ashesi university

Aug 2020-May 2022

- Provided one on one tutoring to 3 first year students in arithmetic, helping them to develop problem solving skills.
- Received positive feedback from students for good tutoring abilities with students achieving their best grades in math to date.

Ashesi Muslim community, Ladies Wing

May 2022-May 2023

- Assisted in fostering a sense of unity and collaboration among members through regular meetings and discussions.
- Participated in organizing community gatherings, supporting charity initiatives, and promoting a positive and inclusive environment.

SKILLS

Technical Skills: Proficiency in python for data analysis (Pandas, SciPy, Matplotlib, Seaborn), proficient in R, HTML, CSS, JavaScript, Microsoft office Suite, flask, MySQL

Software Development: Agile Development, Unit Testing, System level testing, user testing, Object Oriented Programming

Soft skills: Excellent communication, adaptable, team-oriented, strong analytical and problem-solving abilities.

Languages: fluent in English, Twi, Hausa, Dagbani