PRINCE AGYEI TUFFOUR

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EDUCATION

Oregon State University – Corvallis, Oregon, USA   Sept 2021 - Dec 2023
Major: Mathematics, MS   **GPA:** 3.44   **Honors**: Distinguished Provost Scholar, 2021
Relevant Coursework: Linear Algebra, Programming and Data Structures, Probability, Applied Machine Learning, Numerical Analysis, Methods and Models of Applied Mathematics, Quantum Computing

Kwame Nkrumah University of Science and Technology – Kumasi, Ghana   Sept 2016 - May 2020
Major: Mathematics, BS, magna cum laude, Top 1%   **GPA:** 3.92   **Honors**: Valedictorian, Mathematics Department
Relevant Coursework: Discrete Mathematics, Statistics, Regression Analysis, Scientific Computing, Optimization
Online Certification: Machine Learning (Coursera), Machine Learning Specialization (Coursera), Deep Learning Specialization (Coursera), JP Morgan Software Engineering Virtual Experience Program (Forage)

EXPERIENCE

The AFEX Hub – Ghana/Kenya   June 2016 - July 2021
Database Management Specialist
- Spearheaded indexing improvements and normalization techniques, **reducing query run times by 50%** and boosting **database query performance by 40%**.
- Designed and implemented **new database architectures** and **migrated legacy systems**, enhancing data model efficiency and supporting new project releases.

FLEEF Ghana – Ghana   Sept 2018 - Feb 2019
Software Developer
- Developed a **responsive website** using **Python**, **HTML**, **CSS**, and **Flask**, **increasing traffic by 45%** and **user engagement by 20%**.
- Organized and conducted training on ethical leadership, alongside weekly seminars and educational activities.

PROJECTS

Baseline Network Generation Tools for OPUS Projects
- Engineered a **GUI application** with **PySide6** for baseline network generation in **OPUS projects**, including interactive **map rendering**, RINEX **data processing**, and **XML configuration**, improving design and visualization efficiency by **40%**.
- Developed **Python scripts** using **geospatial libraries** for **data analysis**, **inter-station distance calculation**, and **optimal** hub location identification, leading to a **30%** reduction in project setup time.

Full Stack Blog App
- Created a full-stack blog application with **Python**, **Flask**, and **SQLite**, enabling **CRUD operations** and **user authentication**, resulting in a **25%** increase in user engagement.
- Added **JavaScript functionality** for commenting on posts, enhancing interaction and engagement by **20%**.

MyPass Password Manager
- Built a **secure offline password management system** with **search functionality**, improving password retrieval efficiency by **50%**.
- Enhanced **user experience** by implementing **strong random password generation**, copied directly to the clipboard, and stored in an **encrypted JSON file**.

SKILLS

- **Programming languages**: Python, Javascript, C++, MATLAB, R, MySQL
- **Experience with**: PyTorch, Tensorflow, Keras, Machine Learning/Deep Learning Algorithms, Bash, Nodejs, jQuery, HTML 5, CSS 3, React, PostgreSQL, MongoDB, Flask, Django, AWS, Docker, Google Cloud Platform, Linux/Unix, Git, Express, RESTful APIs

CAMPUS INVOLVEMENT

- **American Mathematical Society**, *Participant*, Oregon State University, Sept 2021 - Present
- **Society for Industrial and Applied Mathematics,** *Participant*, Oregon State University, Sept 2021 - Dec 2023
- **Artificial Intelligence Graduate Students Club,** *Participant,* Oregon State University, Sept 2022 - Dec 2023