PRINCE AGYEI TUFFOUR

❖ linkedin.com/in/prince-agyei-tuffour/ ❖ github.com/nanaagyei ❖ princeagyeituffour.com ❖ tuffourp@oregonstate.edu

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

Machine Learning Web App for Salary Prediction
- Developed a **machine learning model** with **85%** accuracy for **predicting software development salaries**, reducing hiring costs by **30%**.
- Integrated the model into an **interactive web app** using **Python** and **Streamlit**, making salary predictions accessible and practical.

Facial Recognition Research Project
- Conducted **research** on **PCA**, **KL Expansion**, and **SVD** for **facial recognition preprocessing**, reducing a dataset from **10,000+** images to **150 eigenfaces**, achieving **80% accuracy**.
- Improved facial recognition performance by implementing **KNN** on preprocessed data, enhancing security protocols and user experience.

GPU Memory Profiler
- Contributed to developing a **GPU Memory Profiler**, resulting in a **30%** reduction in **memory usage** and a **25%** increase in **processing speed** for deep learning tasks.
- Involved in memory tracking, **visualization tool creation**, and **profiling report generation**, showcasing **cross-functional collaboration** and **technical problem-solving**.

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