THIBAUT KWADZO TEBI

Date of Birth: 15/12/1997 | Nationality: Ghanaian | Address: P. O. Box LG25 , Legon-Accra, Ghana

Education

Data Analytics

Bachelor of Science in Engineering (Biomedical)

Sept 2017 - Nov 2021

University of Ghana [https://www.ug.edu.gh/]

Accra, Greater Accra

Grade: Second Class Upper Honour (FGPA:3.12/4)

Nov 2022 - Aug 2023

Accra, Greater Accra

AZUBI Africa [https://www.azubiafrica.org/]

Professional Training: Statistical Analysis, Programming (python, SQL), Machine/Deep learning, Git, Databases, Communication and Presentation Skills, Data story telling, PowerBI and Excel.

Work Experience

Graduate Robotics Intern

Feb 2021 -Present

MakersPlace, Ghana

Accra, Greater-Accra

- Taught coding, Arduino, microbit and robotics to 20 students in grades 6-12, resulting in an average improvement of 90 percent in students' coding and robotics skills.
- Assembled robotic parts and electrical components to create functional robots over the course of the internship.
- Designed and simulated 7 simple circuits and printed circuit boards (PCBs) using Proteus and Eagle software, resulting in 3 successful prototypes.

Teaching and research Assistant

Oct 2021 -Aug 2022

University of Ghana, Biomedical Engineering Department

Accra, Greater-Accra

- Instructed 70 undergraduate students in courses such as medical imaging, differential equations, engineering mechanical systems, and bio-instrumentation, with an average student satisfaction rating of 4/5.
- Prepared 5 lecture slides and conducted 5 tutorials and lab sections for third and final year students per week, resulting in 95 percent improvement in student performance.
- Conducted literature review and contributed to 4 projects, resulting in 2 currently under review for publications.

Medical Records Assistant

Jun 2018 - Sept 2021

University Hospital, Legon

Accra, Greater-Accra

- Maintained the confidentiality of over 300,000 patients medical records in accordance with hospital policies, with a 100 percent compliance rate over the duration of employment.
- Inputted averagely 150 patients medical data accurately into the hospital's electronic health record (EHR) system daily, achieving a 100 percent accuracy rate.
- Created and customized averagely 45 patient's medical folders using the electronic health record (EHR) system per day.

Biomedical Engineer (Intern)

Jun - Aug 2019

University Hospital, Legon

Accra, Greater-Accra

- Troubleshot biomedical equipment, identifying and resolving five number of equipment issues per week on average.
- Contributed to the maintenance of medical equipment such as MRI, CT, X-ray machines, and ultrasound equipment, ensuring a 90 percent reduction in equipment downtime.
- Assisted in the training of 30 clinicians on the appropriate usage of medical equipment, resulting in 95 percent improvement in the proper usage of medical equipment.

Computational Skill

Python | SQL | Machine/Deep Learning | MATLAB | C-programming | Proteus | LabVIEW | LaTeX | Git | Image processing and Segmentation | PCB design (Proteus, Eagle) | CAD (Solid-Works) |

Language Skill

| English(C1) | French (B1) |

University Projects

Breast cancer survival prediction using Deep learning on SEER database.

Aug 2022-April 2023

- Conducted literature review on breast cancer, Collected and pre-processed 48,9130 datasets retrieved including Age, Race, Marital Status, CS Tumour size, Vital status recode, Survival Month, Primary Site-labeled, Grade, Diagnostic.
- Developed and trained both deep learning models (convolutional neural networks (CNNs)), and traditional machine learning models, such as Naïve Bayes, Logistic Regression, Decision Tree, and Random Forest. Compared the performance of these models, and the deep learning models outperformed with an accuracy of 90.8 percent.
- Evaluated the performance of the trained models using a 10-fold cross-validation method and confusion metrics . supervisor: Dr.Samuel Kojo Kwofie

Design of Automated Neonatal Chest Compressor to Aid in Cardiopulmonary Resuscitation. Dec. 2021-Jan 2023

- Designed the electronics components of the device including the controllers, power supply and sensors.
- Integrated the electronics components with the hardware components to create a functional prototype of the device. supervisor: Balapangu S. Srinivasan

Evaluation of Cardiac Structure and Function among University of Ghana Student-Athletes Mar-Dec 2022

- Collected and analyzed data on cardiac structure and function among student-athletes
- Compared the cardiac structure and function of student-athletes to non-athletic controls to identify any differences. supervisor: Dr.Richard Dey

Design of home-based assistive physical training device for monoplegia post-stroke patients. Apr-Nov 2021

- Conducted a thorough literature review on stroke, the biomechanics of the upper limb and the state-of-the-art techniques in home-based physical training devices for upper limb post-stroke patients with monoplegia.
- Designed a conceptual model for the assistive device using computer-aided design (CAD) software(solid-work)
- Conducted finite element analysis to evaluate the usability and effectiveness of the device. supervisor: Dr. Jocelyn K. Brobbey

Certification

- Machine learning with Python (IBM certificate). $[https://www.credly.com/badges/62470371-fbf7-4621-a1d5-c3de722c9895/public_url]$
- Python for Data Science, AI and Development(IBM certificate). [https://www.credly.com/badges/f0f17053-9e51-4f96-b711-8bfe00218f69/public_url]
- Deep Learning with PyTorch : Object Localization.

 [https://www.coursera.org/account/accomplishments/certificate/JJCXK62SS66L]
- AWS Machine Learning from Amazon Web Services (AWS Certificate). [https://coursera.org/share/5fac1241fe53b7b070c15fde163c8b37]

Professional Society and Affiliations

- AI Ghana (Mentee)
- University of Ghana Business School Innovation and Incubation Hub(UGBS-IIH)
- Black In Artificial Intelligence (AI)

Achievement/Award

- Agricultural Manufacturing Group Limited (AMG): Grant of GHC 20,000 (3,300 U.S dollars) from AMG Ghana for start-up project on development of Uterine Fibroid Test kit. (2021)
- University of Ghana scholarship award: Three-years Full-tuition and part-time job scholarship Award for brilliant but needy student (2018-2021)

Leadership Experience

Director of education and volunteers

 $MMG\text{-}Foundation,\ Ghana.$

2020 -Present

 $Accra, Greater\hbox{-}Accra$

President of Anlo Senior High School Old Student Association, Legon

 ${\bf 2020 \; - September \; 2021}$

University of Ghana, Legon

Accra, Greater-Accra