# **Emmanuel Amankrah KWOFIE**

amankrahkwofie354@gmail.com | GitHub | LinkedIn

### **PROFESSIONAL SUMMARY**

A researcher and software engineer with focus on nutrition, food for health and environmental sustainability. Proven experience in building Al-driven solutions and platforms for research, analytics and food policy monitoring. Passionate about bridging the gap between technology and sustainable healthy food systems.

## PATENT/PUBLICATION

Design Patent: "AMPSKOURT DESIGN" (Registration No. 00-457/2023). Registered artistic work with Ghana Copyright Office. Co-inventors: Moses Monday Omaniyi, Emmanuel Amankrah Kwofie and Prince Deku De-Gualle. Assigned to Kwame Nkrumah University of Science and Technology. Date: December 29, 2023.

Agyemang, P., Kwofie, E. M., Baum, J. I., Wang, D., & Kwofie, E. A. (2025). Environmental-health convergence: A deep learning-oriented decision support system for catalyzing sustainable healthy food systems. Environmental Modelling & Software, 185, 106309. https://doi.org/10.1016/j.envsoft.2024.106309

Afrifa, D., Asamoah, B., Kwofie, E. A., Asamoah-Mensah, A., Osei, M. F., Oluwole, A. B., Kemi, M. M., Omowumi, E. A., Omoniyi, M. M. & Obukowho, E. B. (2023). Post COVID-19 Lockdown in Ghana: What is the Wellbeing Status of the Young Adults? Current hypertension reviews, 19(1), 52–58. https://doi.org/10.2174/1573402119666230106140607

Awuah, J., Adams, C., Asamoah, B., & Kwofie, E. A. (2022). The Impact of COVID-19 outbreak on the mental wellbeing of student-athletes and non-athlete students in a university in Ghana. International Journal of Physical Education, Sports and Health. 9(6) <a href="https://doi.org/10.22271/kheljournal.2022.v9.i6f.2728">https://doi.org/10.22271/kheljournal.2022.v9.i6f.2728</a>

### **SOFTWARE DEVELOPMENT PROJECTS**

**Project Vinerals**: Al-based personalized dietary & exercise recommendation system. Apr-Nov 2023 **DISH for Research**: Platform for sustainable food choice research. Jun-Sept 2024. View project

FSROAS project: Al-driven decision support for sustainable healthy food systems. Nov 2024. View project

### **RESEARCH PROJECTS**

Assessment of the dietary patterns of Division III football players (Sept. 2019 – Feb. 2020)

Role: Student Researcher

Methods: Survey design & administration, interviews, data analysis with Excel.

Finding: slow muscle development and injury recovery due to inappropriate diet routines of athletes.

### Assessing the impact of COVID-19 outbreak on student athletes (Sept. 2022)

*Role*: data analysis with IBM SPSS software *Methods*: Survey design & administration.

Finding: increased levels of depression, anxiety and stress in student athletes due to abrupt halt in activity level

### **TECHNICAL SKILLS**

- Programming languages
  Python, Rust, Solidity, Typescript, CSS, HTML
- Technical communication
- Machine Learning
- DevOps

#### **PROFESSIONAL SKILLS**

- Cross-functional teamwork
- Project management
- On-the-job learning
- Team leadership
- Adaptability

## **RELEVANT PROFESSIONAL EXPERIENCE**

**Software Engineer**, SASEL Lab McGill, Jun. 2024 – present.

- Implementing full-stack development for robust, user-friendly applications.
- Developing custom software solutions for specific use cases and stakeholders.
- Translating complex research into practical impactful software tools.

## Teaching & Research Assistant, KNUST, Sept. 2020 - Dec. 2023

• Prepared and delivered lectures and practical sessions on Biomechanics, Sports Informatics and Analytics, and Kinesiology for 3rd and 4th-year students.

# **CERTIFICATIONS/EDUCATION**

- Al Engineering, IBM, 2023, Certificate
- Data Analytics Professional Certificate, Google, 2023
- MPhil Human Nutrition & Dietetics, (not completed) KNUST, Kumasi, Ghana. 2022 2023.
- BSc Sports & Exercise Science, (1st class honors) KNUST, Kumasi, Ghana. 2016 2020

### **AWARDS**

- Best Abstract, Dept. of Human Nutrition & Dietetics, KNUST, 2023
- Best graduating student, Dept. of Physiotherapy & Sports Science, KNUST, 2020

## **LANGUAGES**

English (fluent); Spanish (basic)

#### **REFEREES**

Dr. Ebenezer Miezah KWOFIE

Associate Professor, Dept. of Bioresource Engineering | McGill University | ebenezer.kwofie@mcgill.ca

Dr. Monday Omoniyi MOSES

Professor, Dept. of Physiotherapy & Sports Science | KNUST | momoses@knust.edu.gh