# Joana Konadu Owusu

Cell: +233 554 019 247 | Email: joanaowusu8@gmail.com| GitHub: https://github.com/joan947 | LinkedIn: https://www.linkedin.com/in/joana-konadu-owusu-8b735b182/ | Credly Acclaim: https://www.credly.com/users/joana-konadu-owusu/badges | Website: https://joan947.github.io/ijoan/

# **Personal Information**

Surname: Owusu

First name: Joana

Other name(s): Konadu

Date of Birth: 28<sup>th</sup> July, 1998

Nationality: Ghanaian

Postal Code: AK325

**Languages Spoken:** English, Asante Twi

# **Objectives**

I am an ambitious and goal-oriented individual with an interest in software development, cybersecurity and artificial intelligence. I seek to improve my knowledge in these fields by engaging in related challenges. My future career goal is to contribute to the development of efficient and robust technologies that will impact the health sector positively and greatly especially in areas under mental health and disease diagnosis. I love teamwork and collaborations and I am drawn towards places and people that embrace innovation and enhance creativity.

# **Skills and Competencies**

- **Skills:** Excellent programming and analytical skills, effective communication and organizational skills, good time management, research and data collection abilities, Good leadership and teamwork abilities.
- Programming Languages: Python, SQL, Git, Node JS, React, CSS, HTML, Django, Java, C++, JavaScript
- Frameworks: Node JS, React, Django, MySQL, MongoDB, TensorFlow, SQLlite
- **Software Tools:** GitHub, Google Colab, Anaconda, Android Studio, Visual Studio Code, Microsoft Excel, Microsoft Office, Microsoft PowerPoint
- Hobbies: Reading, Cooking, Singing and Dancing.

## **Educational Background & Certificates**

# **Software Development Certificate**

• Institution: LinkedIn Learning

• Link: View Certificate

• Topics Covered: Full-Stack Development, Programming Languages, Web Design, Databases

#### **Enterprise Design Thinking Practitioner**

Institution: IBMLink: View Badge

• Topics Covered: Collaboration, Synthesis, Design Research, Prototyping, And Storytelling.

#### **Microsoft Azure Fundamentals**

• Institution: Microsoft

• Link: View Badge

• Topics Covered: Cloud Data, Cloud Networking, Cloud Security, Azure, Cloud Storage, Cloud Services, Virtualization

#### **Business Model Canvas**

• Institution: Open Learn Create

• Link: View Badge

• Topics Covered: Business Models, Business Development

#### **Python: Design Patterns**

• Institution: LinkedIn Learning

• Link: View Certificate

• Topics Covered: Python, Design Patterns

## Bachelor of Science (BSc) - Computer Science & Engineering

• Duration: September 2016 - August 2020

• Cumulative Weighted Average (CWA): 79.66%

• Institution: University of Mines and Technology, Tarkwa

• Thesis title: A Shopping Assistant for the Visually Impaired using Deep Learning and Computer Vision

• Supervisor: Mr. Richard Kofi Annan

• Outcome: An android application that utilized the smartphone's camera was developed. The application Operated via voice input and audio output to make it user accessible. It operated by detecting or identifying text and objects in real time to either read words and sentences to the user or mention the names of objects identified.

### **West African Secondary School Certificate**

• Duration: September 2012 - May 2015

• Institution: T.I Ahmadiyya Senior High School

• Programme: General Science

# **Professional Experience**

Title: Web Application Developer

**Institution:** Freelancer

**Duration**: August 2018 – Present

# **Duties/ Responsibilities**

- I create the visual layout and user interface of websites, convert mockups into usable web presence, test the website's functionality, performance, and security to ensure that it meets the requirements and standards.
- I am responsible for communicating with clients to understand their requirements, answer their questions, and keep them updated on the progress of a project.
- I develop websites using HTML, CSS, JavaScript, and frameworks such as React, Django or WordPress CMS

Title: Information Technology Coordinator

Institution: GES (Ghana Education Service) - Asuoso Community Senior High School

**Duration:** November 2021 – Present

### **Duties/ Responsibilities**

- Created a Student Records management system using Django and MySQL to keep records of student performance data in the school
- I administer and maintain the school's information technology systems and networks while maximizing the systems' efficiency and effectiveness.
- Ensure wireless network connectivity and security and resolve problems reported by users.

- Manages various student and staff database's access, permissions, security etc., and devise and implement processes for resolving faults and data loss.
- Oversee and coordinate educational technology initiatives that enhance both teaching and learning in the school
- Perform troubleshooting, repairs, maintenance activities and data restoration on computer systems and lab equipment.
- Facilitate training sessions for teachers and students in using new educational frameworks and technologies that has been integrated into the curriculum of the school

Title: Research & Administrative Assistant

**Institution:** Institute of Research, Innovation and Development

**Duration:** October 2020 – August 2021

#### **Duties/ Responsibilities**

I completed my one-year mandatory national service in the **Center for Social Science Research** in this faculty at the Kumasi Technical University.

- Took a lead role in a multifaceted research on "Food Transportation and Security in Ghana", investigating how harvesting, preservation, transportation and food market systems affects food security and effective ways to minimize food insecurity, food spoilage and costs in the Urban communities in Ghana.
- Assisted in a departmental research on the "Perception of Covid19 Vaccine on The Staff and Students of Kumasi Technical University", to assess issues relating to individual's decision to take or reject the vaccine.
- Collaborated with a team in a research project on "The Rampant Increase of Street Child Beggars in the Cities", to investigate the causes, effects and the ways in which the situation can be minimized.
- Conducted interviews and gathered data collected during research to perform data analysis.
- Performed administrative roles for the department.

Title: Field Enumerator & Supervisor

**Institution:** Ghana Statistical Service **Duration:** June 2021 – July 2021

### **Duties/ Responsibilities**

- Trained and assisted other enumerators to collect data.
- Gathered and recorded data from surveys and questionnaires and imported them to Ghana Statistical Service for data analysis
- Read maps and used GPS systems to prepare efficient routes to physically visit citizens and collect necessary data.
- Interviewed residents in assigned areas to explain purpose of census, answer questions and accurately record answers.
- Persuaded residents to comply with census activities through effective management of residents' objections.
- Executed follow up visits to houses to resolve survey issues or obtain additional information, expressing appreciation for participation and regret for inconvenience.

Title: Information Technology Intern

**Institution:** Ghana National Petroleum Cooperation

**Duration:** June 2019 – August 2019

#### **Duties/ Responsibilities**

- Performed Network and System administration tasks on Windows Server and SAP software
- Performed troubleshooting, repairs and maintenance activities in the company.
- Reviewed system and network performance to make proactive adjustments based on established IT policies.
- Installed, modified, and repaired software and hardware to resolve technical issues.

Title: Software Developer Intern

Institution: Mobile Web Ghana

**Duration:** June 2018 – August 2018

### **Duties/ Responsibilities**

Assisted in the training of beginners in website designing.

- Learned software engineering process improvements and best practices.
- Worked with design teams and Senior Software Engineers to build customized software products for consumers.

Title: Mathematics Teacher

Institution: Unique Child Education Complex

Duration: September 2015 – July 2016

#### **Duties/ Responsibilities**

- Taught junior high school mathematics to JHS 1 to 3 (middle school) students during the 2015/2016 academic year
- Assessed submitted class assignments, determined grades, and reviewed work with struggling students to boost success chance.
- Kept classroom environments consistent and focused on learning by establishing and enforcing clear objectives.
- I encouraged critical thinking and problem-solving to help students develop mathematical reasoning through brainstorming and collaboration activities.
- Promoted inclusivity and increased student participation by changing seating arrangements and practicing mixed gender grouping taking into consideration the emotional well being of the students as well.

# **Projects**

- Omni Blog (2022): An online blog where readers can review articles, leave comments and ratings. React, Express, Node.js, Mongo DB, JavaScript, HTML, CSS.
- Shopping Assistant for the Visually Impaired (2020): Machine learning based mobile application for object and text recognition in real time based on Deep Learning, Convolutional Neural networks (CNNs) using TensorFlow Lite, MobileNets, Optical Character Recognition (OCR), Google Speech to Text and Vision APIs.
- School Management System (2019): A desktop-based school management system. Java FX, CSS, SQL Lite, Java.
- Machine Learning Car- Game (2023): Simulation of a self-driving car environment using feed forward neural network and genetic algorithm for optimization .

#### **Interests**

• Data Science

**Technology** 

• Inclusive & Assistive

• Bioinformatics

• Artificial Intelligence -

Machine Learning, Deep Learning, Computer Vision

• Software Development

• Mental Health

Cyber Security

### **Awards & Achievements**

• **Scholarships:** Total Petroleum Scholarship (2017- 2020) – A merit-based full scholarship for exceptional academic performance in my freshman year.

# Extracurriculars, Leadership & Volunteer Experience

Title: Assistant Course Rep (Undergraduate Studies)

Department: Computer Science and Engineering, Class of 2020

**Duration:** September 2016 – August 2020

#### **Duties/ Responsibilities**

- Supported the main class rep in passing on information and suggestions from lecturers to students and vice versa.
- Helped with school events such as fairs, competitions and seminars.
- I assisted administrative staff and lecturers with filings, and other clerical tasks.
- I interacted with my classmates via email and phone, addressing any questions or concerns.

Title: Software Developer and Research Assistant (Volunteer)

Organization: Inclusive Tech Group

Duration: November 2020 – Present

#### **Duties/Responsibilities**

- A member of the product development team that coordinate the design, development, testing and implementation of assistive technology products for Persons with Disability.
- I assist in the planning, hosting and organization of events, training sessions, conferences, fairs and hackathons that take place within the organization.
- I assist in research projects that takes place within the organization

# Workshops, Forums & Conferences Attended

Title: Applied Machine Learning Workshop

**Host Organization:** DeepSphere.Al **Duration:** March 4<sup>th</sup> – 5<sup>th</sup>, 2022

**Title:** Digital Rights and Inclusion Forum (DRIF) **Host Organization:** Inclusive Tech Group and Paradigm Initiative

**Duration:** April 26<sup>th</sup> – 29<sup>th</sup>, 2022

Title: Roles of PLC (Professional Learning Community) Coordinators on the Delivery of PLC

Sessions Workshop

Host Organization: T-TEL (Transforming Teaching, Education and Learning), Ghana Education Service

**Duration:** May 29<sup>th</sup> – June 2<sup>nd</sup>, 2023

# Referees

### Dr. Mrs. Millicent Agangiba

C.E.O - Inclusive Tech Group

Lecturer – Information and Technology Studies Department

University of Professional Studies Mobile Phone Number: +23324997515

Email Address: Millicent.agangiba@upsamail.edu.gh

#### Dr. Bismark Quarku Parker

Lecturer – Center for Social Science Research Department

**Kumasi Technical University** 

Mobile Phone Number: +233244822158 Email Address: bismarkparker@gmail.com

# Engr Dr. Felix Larbi Aryeh

Lecturer/ Webmaster – Computer Science and Engineering Department

University of Mines and Technology
Mobile Phone Number: +233242176842

Email Address: flaryeh@umat.edu.gh

# **Dr. Mohammed Yussif Umaru**

Lecturer – Computer Science and Engineering Department

University of Mines and Technology Mobile Phone Number: +233507072771 Email Address: myumaru@umat.edu.gh