# **Kenneth Dotse**

Box 154, Accra-Ghana | Phone: +233551472525 | Email | Portfolio URL | GitHub

#### **OBJECTIVE**

I am an impact-oriented young person with an insatiable drive for programming and problem-solving. As an ambitious and tech-savvy high school graduate, I am eager to join an organization where I can not only sharpen my skills and knowledge but also make a real impact with my expertise. I have strong interests in robotics, embedded systems, Artificial Intelligence (AI), Tiny Machine Learning (TinyML), and the Internet of Things (IoT). I have a strong desire to link the dots between electrical engineering, innovation, and sustainability.

## **EDUCATION**

## **Keta Senior High Technical School**

Keta, Ghana

General Science

October 2017 – June 2020

Relevant Coursework: English Language, Integrated Science, Mathematics, Social Studies, Physics, Chemistry,

**Engineering Drawing** 

Clubs: Mobile Learning Society, National Society of Black Engineers (NSBE), Student Representative Council (SRC),

Drama and Dance Club

Awards: Costheta Excellent Student Award, Student Leader of the Year, Best Technical Student

#### **WORK EXPERIENCE**

# Mathematics and Computing Tutor, Yongdal Academy

March 2022 – July 2023

- Created the Tech for Everyone Club that taught Python programming and other digital skills to over 100 students.
- Improved students' exam results by 20% through effective study techniques and personalized lesson plans.
- Boosted school enrolment by 5% from the previous year by designing promotional flyers and leading social media campaigns.
- Built and maintained relationships with diverse parents and school authorities.

# Software Engineering Intern, Megaminds Inc.

September – November 2022

- Acquired proficiency in version control systems such as Git and GitHub, streamlining the development process and enhancing code collaboration within the team.
- Collaborated closely with experienced software engineers to design and develop products, gaining hands-on experience in the software development life cycle.
- Produced comprehensive documentation for various projects.

## **Engineering Research Intern, Volta River Authority (VRA)**

May – June 2021

- Conducted in-depth research into the carbon footprints of hydropower development, analyzing their impact on local vegetation and ecosystems.
- Conducted in-depth research into the streetlighting problem in the Mataheko community and leveraged findings to propose and design a smart LED streetlight model.
- Consistently compiled and submitted weekly progress reports to document research findings.

## Student Researcher, Responsible AI Lab

September – November 2021

- Investigated the potential applications of AI in the healthcare sector, exploring ways to improve patient care, diagnosis, and treatment using artificial intelligence.
- Authored an informative article on the concept of "machine unlearning" and its relevance in AI systems, reaching over 100 people.
- Conducted practical testing and evaluation of AI tools designed to enhance and augment human skills in healthcare diagnosis and treatment.
- Successfully trained a machine learning model to predict breast cancer.

#### LEADERSHIP ACTIVITIES

# Academic Representative, then General Secretary, Student Representative Council (SRC)

2019 - 2020

- Surveyed 100 students and leveraged survey findings to plan the technology conference on campus, receiving over 500 students from different schools and 7 speakers.
- Coordinated a tutoring program for 82 students struggling with certain classes.
- Led an on-campus campaign to break the stigma around vitiligo: educated students and staff about vitiligo which helped create a more inclusive and supportive community for people with the condition.

## Robotics President, National Society of Black Engineers (NSBE)

2020

- Won third place out of 32 teams in a hackathon at Mawuli School by working with 6 teammates to develop a smart engineer's hardhat that is integrated with sensors and buzzers, which allows it to detect and respond to hazards.
- Organized STEM workshops for 5 local schools which recorded over 300 participants.

#### **VOLUNTEERING**

### Volunteer, Red Cross Society, Zenu Chapter

Sept 2022 - Present

- Helped increase blood donations by participating in blood drives and other initiatives.
- Educated communities on first aid and CPR techniques to promote safety and emergency preparedness.
- Supported the Red Cross and its humanitarian mission by contributing to fundraising events and initiatives.

# Volunteer and Environmental Sustainability Advocate, ISHARA

Jan 2023 - Present

- Reduced plastic pollution by 10% by implementing bottle dustbins.
- Spearheaded a social media campaign to raise awareness about plastic pollution, reaching 325 people.
- Collaborated with local schools to organize plastic cleanup events, which recorded over 100 students per school.

#### **PROJECTS**

•	NeuroNudge: web app designed to help stroke patients stay organized and focused on their daily tasks.	(Reference)	
•	TypeFury: typing game for K-12 students in remote areas with low internet connectivity.	( <u>Reference</u> )	
•	Word guess game using C	(Reference)	
•	Graphic Design projects	( <u>Reference</u> )	
•	Created the "Ctrl+Shift+Tech" blog to share tech news, tutorials and reviews. Blog has over 100 readers.	(Reference)	

#### AWARDS AND CERTIFICATES

•	KNUST Intensive Web Development Class	(Reference)
•	Google Africa Developer Scholarship Program in 6-month Google Cloud training	(Reference)
•	Microsoft Student Learning Ambassadors Web Development Bootcamp	(Reference)
•	Microsoft Student Learning Ambassadors Python Bootcamp	(Reference)
•	LinkedIn Learning, Confronting Bias: Thriving Across Our Differences	(Reference)
•	LinkedIn Learning, Electronics Foundations: Fundamentals	(Reference)
•	Devtown Back-End Web Development Bootcamp	(Reference)

 Certificate of Appreciation in Energy Resource Management from the Advanced Institute of Technology & Management (Reference)

## SKILLS AND INTERESTS

**Programming Skills:** Extensive experience with C, Arduino, HTML and CSS. Intermediary proficiency with Python programming. Extensive Experience with version control using Git and GitHub.

Graphic Design: Extensive experience with Photoshop and Adobe Creative Cloud

Computer Skills: Proficient with Microsoft Word, Excel (Data analytics), and PowerPoint

**Hobbies**: Blogging and Creative writing, listening to choral music **Languages** - Fluent in English, Akan, and Ewe, beginner in Spanish.