# KENNETH LAYEFA MAX

Email | LinkedIn | Github | Website

#### **RESEARCH INTERESTS**

Algorithms and Complexity theory, Cryptography, Automata Theory, Quantum Computing, Computational Geometry, Graph Theory, Distributed Computing, Mathematical Logic, Algebraic Computation, Category Theory, Probabilistic Methods, Computational Number Theory, Information Theory, Parallel Computing, Coding Theory, Scientific Computing.

#### **EDUCATION**

### **BENG Computer Engineering, University of Benin (UNIBEN)**

2018 - 2024

• Grade: Second Class Upper Honors

**Relevant Modules:** 

Calculus and Real Analysis, Differential Equations and Dynamics, Engineering Mathematics I, II, III and IV, Programming Languages (C, C#, C++, JAVA), Operating System, Digital Electronics Circuit, Data Communication and Networks, Numerical Computation and Statistics, Computer Security Techniques I and II, Fuzzy Logic and Expert Systems, Digital Systems Design with VHDL, Software Engineering I and II (Data structures and algorithms).

#### RESEARCH EXPERIENCE

## Summer Research (Remote), University of Illinois Urbana-Champaign (UIUC)

May – August 2024

Supervisors: [INSERT]

- Selected as one of 81 participants in the 2024 UIUC+ Summer Undergraduate Research Program in Software Engineering conducted by UIUC.
- Labeled 203 Java mutant codes as part of the mutant labeling tasks.
- Conducted over 30% of the Reachability Infection and Propagation (RIP) analysis on Java mutant codes.
- Reviewed and cross-checked other students' RIP analyses for consistency and agreement.

#### **Undergraduate Final Year Research Project, UNIBEN**

June – September 2023

Supervisor: [INSERT]

Research Topic: Enhancing Security Features of a PWA-based student information management system (Case study of Computer Engineering)

- Reviewed existing security features and used that knowledge to implement extra layer of security for the student information management system.
- Existing security features include protection against SQL injection and Cross site scripting.
- Proposed addition of multi factor authentication, salting and hashing of password to enhance existing security.
- Implemented these features into the backend of the Progressive Web Application (PWA).
- Verified that the additional security features work as anticipated.
- Wrote a detailed report of the theory, functionality, and tools involved in this project.

#### **ADDITIONAL EXPERIENCE**

### **Industrial Training (IT) intern, UNIBEN**

February – July 2022

- Actively engaged in learning and implementing web development and software development concepts.
- Demonstrated commitment to enhancing my skills in front-end and back-end development for website, mobile and desktop applications.

- Successfully built projects such as responsive static UNIBEN clone website, portfolio website, and Front-end Ecommerce desktop application using SceneBuilder application and Java programming language.
- Wrote a well-documented report of activities during the internship, which was submitted to the department.
- Successfully defended the internship by demonstrating mastery of skills and valuable experience acquired which earned me an A grade.

#### **WORK EXPERIENCE**

### Freelance Front-end developer, Cybernate Techsphere

January 2024 - present

- Build responsive interfaces with HTML, CSS, JavaScript, and React.js, ensuring cross-browser compatibility.
- Collaborate with UI/UX designers to translate designs into functional user experience.
- Review code, debug issues and optimize performance with techniques like lazy loading and code splitting for faster load times.
- Work with other front-end developers in agile teams to align development with business goals.

### STEM Private Tutor, Physical and online

2022 - present

- Provide individualized tutoring sessions to students in STEM subjects such as Mathematics, computer science, programming, Physics and English language.
- Help students prepare for exams and improve their overall understanding of the subjects.

### Senior Secondary School Teacher, Kingsley Reliable College, Ekosodin, Edo State

2019 - 2020

- Designed and delivered Mathematics and Physics lessons to SS1 students.
- Prepared exams, marked scripts, and compiled results.

## Junior Secondary School Teacher, Eloho Model Academy, Igbogene-epie, Bayelsa state

2016 - 2017

- Taught Mathematics and Introductory Technology to a class over 30 JSS1 students.
- Promoted STEM careers by introducing students to various science, technology, and mathematics (STEM) career paths to inspire future interests.

#### **RELEVANT RESEARCH SKILLS**

- Strong skills in communication, time management, teamwork, leadership, report writing, documentation, analytic thinking, and presentation.
- Skilled in extracting and synthesizing data from scientific literature to support research objectives.
- Experienced in technologies such as JavaScript, Python, Java, PHP, Node.js, HTML5, CSS3, Tailwind CSS, Bootstrap, SQL, MongoDB, ReactJs, React Native, C, C#, C++, and Assembly Language.

#### **ADDITIONAL COURSES**

## HTML, CSS, and JavaScript for Web Developers, Johns Hopkins University (via Coursera)

2024

Completed an online course that enhanced my front-end development skills through practical projects, assessments, and interactive activities. I developed a strong foundation in HTML. CSS, and JavaScript, becoming very proficient in JavaScript. The course also strengthened my analytical thinking, problem-solving abilities, and capacity to manage continuous and demanding workloads effectively.

## MEMBERSHIP OF PROFESSIONAL SOCIETIES

• National Society of Black Engineers (NSBE)

2024

## **REFERENCES**

[INSERT REFERENCES]