Kwaaku Boamah-Powers

+1 (640) 216-6508 | kb4242@nyu.edu | LinkedIn | GitHub

EDUCATION

New York University

BS Computer Science, Minors in Applied Mathematics and Interactive Media *Aug. 2022 – May 2026*

- **Relevant Coursework:** Data Structures, Algorithms, Computer Systems Organization, Probability and Statistics for Engineers, Linear Algebra, Calculus
- **GPA:** 3.7

SKILLS AND CERTIFICATIONS

Languages: C/C++, Python, MATLAB, JavaScript, Dart
Developer Tools: MongoDB, Express.js, React.js, Node.js, Tailwind CSS, Flutter, Firebase, BLoC
Certifications: Introduction to Cybersecurity, J.P. Morgan Chase & Co. - Software Engineering Job Simulation

EXPERIENCES

Teaching Assistant - Computer Programming for Engineers September – December 2023

New York University Abu Dhabi *Abu Dhabi, UAE*

- Developed C++ and MATLAB lab materials by identifying key concepts, designing interactive exercises, and incorporating feedback, with pre- and post-lab assessments showing improved comprehension for 30+ students
- Facilitated hands-on lab activities with coding challenges, using quizzes to measure a 15% improvement in lab scores, and employed personalized guidance and peer collaboration to clarify challenging concepts
- Mentored 5 teams on Unity-based VR projects targeting healthcare issues, providing technical guidance and regular feedback, resulting in a 98% project completion rate and improved team collaboration

Cyber Security Analyst Intern July – August 2023

Kwame Nkrumah University of Science and Technology - UITS *Kumasi, Ghana*

- Assessed existing systems, implemented Snyk into the development pipeline, conducted vulnerability assessments, fixed 50+ vulnerabilities, and measured a 30% security enhancement through follow-up scans and metrics
- Analyzed system weaknesses, developed stronger security requirements, conducted 15 training sessions for 120 employees, and implemented regular audits, resulting in a 25% increase in security compliance and a 40% reduction in password-related breaches
- Configured 10 Debian 12 environments, installed Nessus for vulnerability scanning, conducted weekly scans, and collaborated on remediation efforts, resulting in a 20% reduction in network threats as verified by follow-up assessments and incident reports

PROJECTS

Real Estate App | *MongoDB, React, Node.js, Express.js, SCSS* July - August 2024

- Engineered a full-stack real estate platform using React, Node.js, Prisma, and Socket.io, featuring real-time chat and efficient property management, resulting in a 35% increase in user engagement and a 30% faster property browsing experience
- Strengthened authentication security using JWT and bcrypt, blocking 95% of brute-force attacks and mitigating 80% of session hijacking attempts in local security tests
- Streamlined API performance by designing efficient RESTful endpoints, leading to a 40% reduction in load times for property search and profile management operations

Expense Tracker | *Flutter, Dart, Firebase, BLoC* June 2024

- Developed a cross-platform expense tracking app using Flutter, reducing data synchronization issues by 90% through the integration of Firebase for real-time cloud storage
- Implemented dynamic charts using the fl_chart package, enhancing data visualization capabilities and enabling users to track and analyze spending patterns, resulting in a 25% increase in user engagement with financial insights
- Utilized BloC for state management to maintain a scalable and maintainable codebase, resulting in a 50% improvement in code readability and 30% faster bug resolution across both Android and iOS platforms

AFFILIATIONS

ColorStack | *Community Member* May 2024 - Present
CodePath | *Community Member* May 2024 - Present