

Reginald Kotey Appiah-Sekyere

+971 56 2004 122 | rka6631@nyu.edu | [linkedin.com/in/reginaldkotey](https://www.linkedin.com/in/reginaldkotey) | [Portfolio](#)

EDUCATION

New York University Abu Dhabi

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 3.77

Abu Dhabi, United Arab Emirates

Aug 2022 – Dec 2026

EXPERIENCE

Technical Co-Founder

Behavioral Risk Intelligence

June 2025 - Present

Abu Dhabi, UAE

- Designed and deployed a **microservice-based** system with more than 7 microservices and an **API Gateway**, enabling scalable, fault-tolerant service communication between independent components
- Implemented a containerized architecture with **Docker** to enable seamless cloud migration and prevent configuration conflicts, ensuring consistent deployments across development, staging, and production
- Configured deployment on **Google Cloud** using **Compute Engine** and **Cloud Run**, achieving automated scaling and streamlined resource management.

Software Engineering Intern

Buzz Mobility

Apr 2024 – Jul 2024

Abu Dhabi, UAE

- Designed and integrated secure mobile payments features using the PayStack **API**, implementing secure transaction protocols, resulting in a 12% increase in daily transactions and improved the overall reliability of the platform by 10%.
- Enhanced client-side security through **CSP** implementation and **webpack** optimization, reducing **XSS vulnerabilities** and improving load times by 25%.
- Conducted regression testing and performance analysis on payment service, ensuring high availability and optimal performance by identifying and resolving potential bottlenecks and points of failure

Software Engineering Intern

UCC, Network Section

Jun 2023 – Aug 2023

Cape Coast, GH

- Developed a campus network problem management system using **Spring Boot**, and **MongoDB**, increasing error detection by 20% and reducing annual costs by 15%.
- Executed comprehensive **QA testing** for a new application, uncovering and documenting **14 critical bugs** to enhance system reliability and performance.
- Monitored and analyzed network traffic in a newly developed **LAN** using **Wireshark**, identifying bottlenecks and optimizing performance to reduce downtime by 40%.

PROJECTS

Comunica (Open Source) | *TypeScript, Python*

Jun 2025 - Aug 2025

- Architected and implemented a robust query processing unit in **TypeScript** and **Python**, designed to retrieve and manage data from **vector databases** efficiently, improving lookup performance.
- Developed a **classification model** to analyze search queries and intelligently determine whether to apply strict (exact) or fuzzy (approximate) matching algorithms, resulting in more relevant search results.
- Integrated a query processing unit with Comunica's existing **open source** knowledge graph framework, creating a more cohesive and powerful data retrieval system.

TECHNICAL SKILLS

Languages: C++, C, Java, JavaScript, Python, SQL (MySQL), HTML, CSS, Assembly, MATLAB

Frameworks: React, Express, Node.js, NextJS, WordPress, Tailwind, THREE.js, GSAP, MongoDB, Supabase

Developer Tools: Git, Spring Boot, Google Cloud Platform, Visual Studio, MongoDB, Linux, Docker, Arduino IDE

Skills: DevOps, Full-Stack Development, Machine Learning, Networking, Photography

CERTIFICATIONS

- Neural Networks and Deep Learning**
- Google Cloud, Core Infrastructure**