Appiah-Sekyere Reginald Kotey

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Education

New York University — New York, NY
Bachelor of Science in Computer Science, Minor in Mathematics — *Aug. 2022 – May 2026*
GPA: 3.7

Experience

Audio Visual Technical Assistant — Jan 2023 – Jul 2024
New York University Abu Dhabi — *Abu Dhabi, UAE*

- Developed and improved the Audio-Visual user interface for classroom systems across campus by working together with a team of A/V and software engineers, resulting in a 24% increase in usage and overall satisfaction
- Provided expert technical support for over 500 customers, resolving 95% of reported bugs within 24 hours and maintaining a 98% customer satisfaction rate
- Completed and optimized the department database by filling in critical gaps, leading to a 15% increase in operational efficiency and improved data structure.

Network Sector Software Engineer Intern — Jun 2023 – Aug 2023
University of Cape Coast — *Cape Coast, GH*

- Developed a campus network problem management system using React, Express, and MongoDB, increasing error detection by 20% and reducing resolution costs by 30% through web application implementation.
- Implemented advanced debugging techniques, including profiling and memory leak detection with tools like GDB, on a legacy codebase, resulting in a 10% improvement in system performance and stability.
- Built and tested network configurations using GNS3 to simulate and analyze network performance under various conditions achieving a 20% improvement in network reliability

Projects

AppleWebClone | *React*

* Integrated Tailwind CSS, ensuring 100% consistency across components and reducing styling-related debugging time by 40%
* Utilized GSAP and THREE.js to create immersive animations and 3D renderings, resulting in a 40% increase in average time spent on site
* Monitored web performance and user interactions using Sentry, achieving a 100% rating for crucial metrics such as Largest Contentful Paint (LCP) and Time to First Byte (TTFB)

RekasBot | *JavaScript, C*

* Integrated machine learning capabilities using ml5.js, enabling the car-robot to recognize and respond to 6 different hand gestures with 90% accuracy
* Developed an autonomous mode using probabilistic algorithms for random movement patterns, increasing user engagement time by 20% during periods of inactivity
* Optimized gesture recognition model through data augmentation and hyperparameter tuning, improving the bot's overall reliability by 50% and reducing false positives by 30%

HotelFinder | *C++*

* Developed a custom Hashmap class to store hotel dataset of over 100,000 hotels around the world optimizing data retrieval and manipulation with a constant time complexity.
* Implemented a custom AVL Binary Search Tree, optimizing data operations with O(log n) time complexity for insertions, deletions, and lookups in the hotel management system
* Optimized hotel search functionality using advanced algorithms, resulting in a 95% reduction in search time and improved result accuracy

Technical Skills

Languages: JavaScript, Python, C/C++, SQL (MySQL), MongoDB, HTML, CSS, Assembly
Frameworks: React, Express, Node.js, WordPress, Tailwind, THREE.js, GSAP
Developer Tools: Git, Google Cloud Platform, Visual Studio, MongoDB, Replit, Docker
Personal: Photography, Gaming