

CALEB KWAKYE

Richmond, VA 📞 804-688-9984 ✉️ caleb.kwakye@richmond.edu [in linkedin](#) [github](#) [website](#)

Education

University of Richmond

Honors: Dean's List

Expected December 2025

Bachelor of Science in Computer Science,

Richmond, VA

Relevant Coursework: Data Structures, Algorithms, Computer Architecture and Organization, Database Systems, Software Systems Development, Human-Computer Interaction

Technical Skills

Languages: Python, Java, C++, JavaScript

Technologies/Frameworks: Azure, MongoDB, Express.js, React.js, Redux, Node.js, Postman, Bootstrap, Django, Jira, Figma, MySQL, HTML5, CSS, Git, GitHub

Experience

Karpool — *Software Engineer Intern* | Cape Town, South Africa

July 2024 – August 2024

- Reengineered the frontend of the mobile app by architecting core feature components in React Native.
- Implemented pre-existing Figma wireframes into responsive and intuitive mobile UI to ensure alignment between design and app functionality.
- Managed project tasks using Jira and tracked project schedules and milestones. Managed team requests and ensured timely project completion, improving workflow to increase efficiency by over 30%.
- Collaborated with the backend team to implement secure, scalable authentication features, with login and registration flows, to facilitate the integration of backend services with UI components.

University of Richmond — *iOS Engineering Research Assistant* | Richmond, VA

May 2023 – June 2024

- Worked in a team of 5 to contribute to a pioneering study on Attention Deficit Hyperactivity Disorder (ADHD) prediction using smartphone sensing and ecological momentary assessment (SASSEMA).
- Engineered the development of the SASSEMA iOS app to utilize Swift's Core Motion and HealthKit frameworks to capture and analyze user data.
- Programmed background operations and implemented a data upload mechanism to optimize data handling and reduce local storage requirements by 70%.
- Designed and built a dedicated iOS survey app to streamline questionnaire distribution and automate data collection, leading to a 10 – 15% reduction in operational costs.
- Engaged with a multidisciplinary team to define scope and deliverables. Worked closely to align the app's features with the goals of the research study.

Projects

iXplore Tech Blog App | *MongoDB, React, Express.js, Node.js, Postman, Bootstrap*

[View Project](#)

- Built a full-stack blog post application using React for the front end and Node.js, Express, and MongoDB for the backend. Utilized JWT authentication to secure user data.
- Implemented RESTful API endpoints using Node.js, Express, and MongoDB, handling authentication, client requests, and performing CRUD operations. Tested and validated endpoints with Postman.
- Implemented MongoDB for data storage with efficient schema design to handle complex relationships between users, posts, and categories. Integrated Mongoose for object modeling.

SpiderMart Online Marketplace | *Django, Python, HTML, TailWindCSS, Javascript*

[View Project](#)

- Built core platform features of the e-commerce web app using Django and JavaScript.
- Developed system functionality to support product categories, boosting user experience and platform utility by 30%.
- Designed and implemented a product search and filtering system to enhance search accuracy and optimize query performance.
- Integrated a comprehensive seller dashboard to streamline product management and customer engagement.

Leadership / Clubs & Affiliations

Code2040 | Fellow | Remote

September 2024 – Present

Codepath | Community member | Remote

May 2022 – Present

ColorStack | Community member | Remote

December 2022 – Present

Association of Computing Machinery (ACM) | Community member

July 2022 – Present

Arts & Sciences NEXT | Ambassador | University of Richmond

August 2022 – January 2023