

Otis Opoku

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EDUCATION

Lehigh University - Bethlehem, Pennsylvania, USA

Graduating May 2026

Major: Electrical Engineering

Honors: Dean's List

GPA: 3.81

Minor: Computer Science

Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Software Engineering
Web Development, Linear Methods, Calculus

Organizations: NSBE, *Member*, Lehigh University ❖ CodePath, *Member* ❖ IBM Z Club, *Member*, Lehigh University

TECHNICAL SKILLS

- **Programming languages:** Java, Python, TypeScript, C/C++
- **Technologies:** Git, PostgreSQL, APIs, Flutter, React.js, CSS, HTML, Bootstrap, Chakra UI

EXPERIENCE

Microsoft, Incoming Explore Intern | Xbox Team

May 2024 - Aug 2024

STEM-SI, Lehigh University | Research - [Research Poster](#)

May 2023 - Aug 2023

- Collaborated with a multidisciplinary team of faculty and three members to investigate the role of surfactants in diverse applications, including dishwashing, food products, and shaving creams
- Discovered that surfactants are responsible for foam stabilization, texture enhancement in mayonnaise, and the emulsification of oil in water for improved cleaning efficiency
- Developed effective communication and teamwork skills by collaborating with experts from different disciplines, contributing to a cohesive research effort

PROJECTS

The Buzz | React, Flutter, PostgreSQL, Dokku, Java Spark Framework

Jan 2024 - Present

- Collaborating with a cross-functional team of four to build a scalable mobile and web social media app
- Enhanced user security by implementing OAuth2 with Google IDs, ensuring robust authentication and safeguarding user data
- Ensured code reliability through rigorous testing protocols, including unit and integration tests
- Deployed application on Dokku for scalable cloud hosting

RAWGify | React, Chakra UI

- Built a video game discovery platform mirroring RAWG's functionality for an immersive user experience
- Integrated the RAWG API to fuel the platform with real game data, genres, and visuals
- Implemented search and sorting functionalities to streamline game discovery

Robot Control | Python

github.com/Otisopoku/robot-control.git

- Configured a functional robot using CamJam EduKit 3 and a Raspberry Pi
- Utilized Python programming language to control the robot's movements, effectively leveraging the *gpiozero* and *time* modules to manipulate its actions and responses