Otis Opoku

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❖https://otisopoku.github.io/portfolio-website/

EDUCATION

Lehigh University - Bethlehem, Pennsylvania, USA   Graduating May 2026
Major: Electrical Engineering   **Honors**: Dean's List   **GPA**: **3.8**1
Minor: Computer Science
Relevant Coursework: Network Theory, Digital Electronics, Data Structures and Algorithms, Linear Methods
Object-Oriented Programming**,** Software Engineering (Spring), Signals and
Systems (Spring), Electronic Circuits (Spring), Semi-conductor Devices (Spring)
Organizations: NSBE, *Participant*, Lehigh University ❖ **CodePath**, *Member* ❖ **Residence Hall Association**,
Secretary, Taylor House, Lehigh University, September 2022 - May 2023

TECHNICAL SKILLS

- **Programming languages**: Java, Python (intermediate), Javascript (basic)
- **Technologies**: Git, CSS, HTML, CamJam EduKit 3, Raspberry Pi, System Verilog (basic), Bootstrap

EXPERIENCE

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

America Reads/Count Tutoring Program, Lehigh University | *Tutor*   Sep 2022 - Feb 2023

- Provided educational guidance to a cohort of 19 eighth-grade students at Broughal Middle School
- Demonstrated a commitment to academic growth, resulting in noteworthy improvements for about 11 of the students under my tutelage
- Strengthened leadership capabilities and honed effective communication skills through dedicated tutoring efforts

PROJECTS

To Do List Program   **github.com/Otisopoku/ToDoList**

- Developed a sophisticated To Do List program using Java that effectively managed appointments and meetings through an object-oriented approach

- Utilized string manipulation techniques to create readable and user-friendly outputs

Tic-Tac-Toe Game   **github.com/Otisopoku/Console-based-Tic-Tac-Toe-game**

- Designed and implemented a simple and fully functional console-based Tic-Tac-Toe game model using Java, employing object-oriented principles to create modular and maintainable code

- Developed the core game logic and user interaction flow that allow players to input moves and facilitate the turn-based gameplay experience

- Constructed a dynamic 5x5 game board, providing an intuitive visual representation for player moves

Robot Control   **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