

# Shadrack Agyei Nti

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## EDUCATION

### Ashesi University

*Bachelor of Science in Computer Engineering*

Berekusu, Ghana

Sep 2022 – Jun 2026

- **Relevant Coursework:** Object Oriented Programming, Computer Programming for Engineering, Foundations of Design Thinking, Multivariable Calculus & Linear Algebra, Discrete Structures & Theory

## TECHNICAL SKILLS

**Languages:** Java, Python, C/C++, JavaScript, HTML/CSS, Flutter/Dart, Latex

**Worked with:** Figma, VS Code, Android Studio, PyCharm, IntelliJ, Notion, MatLab, Solidworks, Turtle

## EXPERIENCE

### Computer Programming Tutor

*Ashesi University*

Jan 2024 – Present

*Accra, Ghana · Remote*

- Provide tutoring for 20+ students for the course Introduction to Computing Programming (in Python).
- Helped students build problem-solving skills by breaking down complex programming problems into manageable steps and encouraging them to think critically about problem-solving approaches.

### Engineering Coach, Ashesi Innovation Experience

*Ashesi University*

Jul 2023 - August 2023

*Accra, Ghana · On Site*

- Coached high school students in engineering design, emphasizing the importance of the design cycle and prototyping leading to the creation of a functional conveyor belt system.
- Guided 20+ students through C coding in Arduino, taught them to debug code increasing their efficiency in coding C enabling them to code for the maneuverability of the conveyor system in 2 days
- Broke down the process of laser cutting and 3D printing into easily understandable chunks which enable over 15+ students 3D print and laser cut in the same day.

### Public Relations and Communications Intern

*UniGhana*

Jul 2023 - August 2023

*Accra, Ghana · Hybrid*

- Handled outreach engagements by planning visits to senior high schools ensuring timely delivery and minimizing costs.
- Created visually appealing posters and flyers in addition to managing socials leading to a 100% increase in follower count, increased engagement across all socials, and a 100% turnout rate for events.

## PROJECTS

### NASA Mars Perseverance Rover | C, C++, MIT App Inventor, GitHub

Apr 2023 – May 2023

- \* Designed and implemented custom navigation algorithms in a team of five (using C/C++) for a Mars Rover model, achieving 90% obstacle avoidance accuracy, focusing on software efficiency and algorithm precision.
- \* Enhanced sensor data processing and integration, leading to a 30% faster response time by refining algorithms and leveraging Arduino libraries for efficient sensor utilization.
- \* Utilized MIT App Inventor to develop a mobile app for the Mars Rover's remote control, enabling precise navigation and operational commands via Bluetooth, enhancing the rover's real-time feedback and control capabilities.

### Ludo Game | Python

Nov 2023 – Dec 2023

- \* Designed and implemented custom navigation algorithms in a team of five (using C/C++) for a Mars Rover model, achieving 90% obstacle avoidance accuracy, focusing on software efficiency and algorithm precision.
- \* Implemented object-oriented programming concepts to model game entities and behaviours, using classes for player representation and game state management, enhancing code modularity and readability

## EXTRACURRICULAR

### Outreach Committee Member, Ashesi Student Council

Jan 2024 – Present

### President, Ashesi Chess Association

Jan 2024 – Present

### Library Assistant, Office of Student Life and Engagement

Sep 2023 – Dec 2023