Amir Afiq Mohd Ariff

(814) 414-2044 | amirafiqariff@gmail.com | State College, PA

EDUCATION

The Pennsylvania State University ..... **University Park, PA**
College of Engineering ..... *Anticipated Graduation: May 2026*
Bachelor of Science in Computer Science ..... GPA: 3.58/4.00
Minor in Cybersecurity

PROJECT EXPERIENCE

Blackjack Reinforcement Learning Agent ..... *Nov 2025*
- Built an AI agent capable of learning optimal Blackjack strategy through self-play and reinforcement learning.
- Reached a stable win rate of approximately 42 percent across large-scale simulations, matching optimal theoretical performance.

Autonomous Pathfinder Robot ..... *April 2025*
- Designed and developed an Arduino-powered autonomous robot that follows a black path using color sensor and avoids obstacles with an ultrasonic sensor.
- Implemented recovery logic that enables the robot to reorient itself when off-track through progressive scanning and directional correction.

Intelligent Task Planner Web Application ..... *March 2025*
- Built a full-stack productivity web app that transforms user-entered tasks into structured, editable workflows using OpenAI's language model.
- Integrated Flask for backend API routes, deployed on Render, and connected to a Vercel-hosted frontend.

Course Scheduler ..... *Dec 2023*
- Developed a university course scheduling application using JAVA, allowing students to efficiently plan their courses.
- Employed methodologies to manipulate and retrieve information from databases using SQL statements.

Scientific Calculator with GUI ..... *April 2022*
- Developed a GUI-based scientific calculator using Python and Tkinter, implementing fundamental and advanced mathematical operations.
- Designed an interactive graphical user interface (GUI) with categorized buttons for numbers, operations, factorial, exponentiation, and special constants.

WORK EXPERIENCE

Penn State Residential Dining ..... **University Park, PA**
Dining Hall Worker ..... *Oct 2022 – May 2024*
- Served an average of 500+ students per shift, maintaining a fast-paced yet welcoming dining environment.
- Implemented an organized system for tracking supplies, reducing waste by 15% and improving cost-effectiveness.

Penn State for Center of Performing Arts ..... **University Park, PA**
Front-of-House Event Staff ..... *Aug 2024 – Present*
- Assisted in seating and ticket verification for events with 1000+ attendees, ensuring a smooth check-in process.
- Addressed an average of 50+ guest inquiries per event, providing clear guidance and enhancing the audience's experience.

SKILLS

Languages: C, C++, Python, Java, Bash, JavaScript, HTML, CSS, SQL
Tools & Technologies: React, NodeJS, Flask, Git, Verilog, Wireshark, Vercel, Render, OpenAI, PostgreSQL
Spoken Languages: English, Malay