Amr El Mantawi

Passionate student who loves to code and build circuits.
I aim to better the world with the use of technology and my innovative ability

📞 (717)- 439-5515
✉ amr.mantawi@gmail.com
📍 PA, USA
⌗ https://github.com/AmrMantawi
In https://www.linkedin.com/in/amrelmantawi/

EDUCATION

Pennsylvania State University, PA — Computer Engineering (BS)
— Physics (minor)
August 2021 – May 2025

Capital Honors Program   GPA: 3.76 / 4.00
Dean's List

WORK EXPERIENCE

Pennsylvania State University, PA — Peer Tutor
August 2022 – December 2022

- Strengthened students' foundational knowledge of their courses.
- Assisted students in understanding concepts of hardware and software engineering within various courses.

PROJECTS

Realms Of Destruction — Game (C++, Unreal Engine, Github)
An online multiplayer game that makes use of impractical, comical weapons and abilities to create an enjoyable playing experience.

- Acquired proficiency in Unreal Engine using online tutorials and official documentation.
- Designed and developed complex gameplay mechanics using Unreal Engine's object-oriented programming paradigm, resulting in a compelling and immersive game experience.
- Utilized advanced networking techniques for seamless server-client communication, resulting in a robust multiplayer experience.

Autonomous Vehicle — Hardware Integration (MATLAB, Linux, Python)
We aim to create a level 4 autonomous vehicle and compete in the Auto Drive Challenge sponsored by General Motors and Intel.

- Developed Python code that utilized CAN signals to enable the vehicle to perform various tasks.
- Collaborated with team members to communicate technical concepts and progress updates.

Mobile Arcade — Hardware Project (Raspberry PI, Python)
A portable mini arcade machine powered by a Raspberry Pi 4 Model B.

- Integrated Python code to enable button functionality using GPIO ports.
- Designed hardware layouts to implement I2S signal to output sound.

SKILLS

Programming Languages
C, C++, C#
Java
Python
SQL
Assembly

Tools
GitHub
Multisim
MaxPlus II
SolidWorks
Unreal Engine
Unity
Blender
Visual Studio
Microsoft Office

Soft Skills
Leadership
Teamwork
Problem Solving
Creativity

Other Skills
Object Oriented Programming
Trouble Shooting
Debugging
Spring Framework
HTML5
CSS
Verilog
Linux
Git

Languages
Arabic, English

Activities and Awards

AVT ~ Member (2023 – Present)
NittanyAI (2023 – Present)
IEEE ~ Member (2021 – Present)
ACM ~ Member (2021 – Present)
Dean's List (2021 – Present)
Coding Club ~ Vice President (2021 – 2023)