ALI ELHEFNAWY

Parit Raja, Johor, Malaysia • hefnawey@yahoo.com • \ +60 11-6453 4715

ABOUT ME

I am an Egyptian Computer Science student at Universiti Tun Hussein Onn Malaysia. I am deeply passionate about multimedia technologies, particularly game development. I constantly seek to expand my skills in this dynamic field during my studies leveraging tools such as Unity and C# to deepen my understanding and proficiency in developing immersive gaming experiences. This passion drives me to continuously refine my creativity and programming abilities.

EXPERIENCE

WAMY VIDEO PRODUCTION

Kuala Lumpur, Malaysia

Video Production Leadership

Aug 2022

- Led a team for WAMY Video Production Competition overseeing the collaborative effort to create a compelling video entry.
- Contributed to the conceptualization, scripting, filming, and editing processes of the video entry.
- emphasizing the value of achievement and ultimately securing 3rd place.

VEX EDR TOWER TAKEOVER

FUTURE ACADEMY, EGYPT

Team Leadership

2019-2020

- Participated in the VEX EDR robotics competition serving as the leader of Team 69838B "Chaos Team".
- Led the team to 2nd place in Egypt, achieving the Design Award.

VEX IQ NEXT LEVEL

MindShine Academy, Egypt

STEM Promotion and Multimedia Production

2018-2019

Led STEM promotion and multimedia production efforts for Team 36327A "Robo Sapience" in the VEX IQ
robotics competition resulting in securing 1st place in Egypt and obtaining the Excellence Award, Teamwork
Champion Award, and 1st Place in Robot Skills Champion.

VEX IQ RINGMASTER

Cairo Stadium, Egypt

Programming Leadership

2017-2018

- Participated in the VEX IQ Robotics Competition, taking a leadership role in programming within Team 10804H "Technical Problems".
- Utilized C++ to code the robot, resulting in substantial contributions to the team's achievement in winning the Amaze Award.

EDUCATION

UNIVERSITI TUN HUSSEIN ONN MALAYSIA (UTHM)

Johor, Malaysia Oct 2021-Present

Bachelor of Computer Science, Minor in Multimedia

- Expected to graduate in February 2025
- Current GPA: 3.8
- Predicted Grade: First Class
- Final Year Project Title: AI-POWERED AND VOICE INTERACTIVE EXPERIENCE INTEGRATED INTO A 3D MAZE VIDEO GAME

Amaze Venture - 3D Video Game Integrated with AI and voice recognition

Oct 2023-Present

- "Amaze Venture" serves as my pioneering Final Year Project (FYP), where it leverages artificial intelligence to develop an immersive 3D Maze video game experience offering players a dynamic blend of interactive gameplay.
- The game integrates AI techniques such as Behavior Trees for NPCs to imbue human-like traits and responsiveness, Finite State Machines for transitioning game elements, Pathfinding AI for smart NPC navigation, and Machine Learning for in-game racing.
- Additionally, it incorporates voice recognition technologies like Text-to-speech for interactive gameplay.

AR TIME TRAVELER - Eucational AR Learning App

Jul 2023

- Led the development of AR (Augmented Reality) learning app for 6th grade students focusing on teaching Malaysian history curriculum subject using Unity Game Engine and Firebase for android users.
- The app is integrated with AR to gamify the experience and entertain students while learn.

POCATCH - AR Video Game

Jun 2022

• Led the development of AR (Augmented Reality) video game for Android users using Unity Game Engine integrated with GPS features which is inspired from Pokemon-Go game.

GOOVER - 2D Side Scrolling Video Game

Jun 2021

• Developed a full 2D runner video game "Goover" for Android users using Unity Game Engine which is inspired from T-Rex google game.

Capture The Flag - 2D Local Multiplayer Video

Aug 2020

• Developed Full 2D local Multiplayer game for Windows users called "Capture The Flag" up to 4 Players using Unity Game Engine during high school.

SKILLS

Programming Languages:

- Programming Languages: C, Java, C# (Excellent);
- Flutter, Kotlin, C++, OpenGL (Very Good);
- Linux/Ubuntu cmd, Windows PowerShell (Good);

Development Software and IDEs:

- Unity, Visual Studio Code, CodeBlocks, Eclipse, Dev C++, Codelite (Excellent).
- Unreal Engine (Very Good).

Design, Editing, and Productivity Tools:

- Blender, Photoshop, Illustrator, Premier, Gimp, Microsoft Word, PowerPoint, Canva (Excellent).
- After Effect, Davinci Resolve, Figma, Audacity (Very Good).
- Fusion 360 (Good).

Languages:

- Arabic (mother language).
- English (IELTS Score 6.5 / CEFR Level B2) Taken on 2/OCT/2021.
- Beginner German.