# **DEEPU DINESH**

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#### PROFESSIONAL SUMMARY

Enthusiastic undergraduate student currently studying BSc (Hons) in Software Development at Technological University of Shannon (Moylish Campus) in Ireland with a strong foundation in programming and software development using languages like C#, C++, Python. Well versed in graphical development using Blender, Photoshop and Unity3D to complement core skills. Eager to apply technical expertise and creative problem-solving skills to contribute effectively to work environments.

#### **SKILLS**

C++, C#, Python, HTML, CSS, JavaScript, Adobe Photoshop, Blender3D, Unity

#### **HOBBIES**

- Game Development
- Strength training (Powerlifting, Boxing, Calisthenics)
- Sports (Cycling, Badminton)

#### WORK EXPERIENCE

## Freelance Developer, Fiverr

2022 - 2023

- Designed and developed custom graphical or gameplay focused projects according to client specifications using Unity3D, Blender, Photoshop and a wide variety of tools to adhere to graphical, audio and visual requirements from clients.
- Delivered 85% of client orders on schedule and secured a 100% satisfaction rate, demonstrating efficiency and reliability in project execution.
- Engaged with a diverse international clientele, interpreting requirements through the language barrier while delivering consistent high-quality results, maintaining an excellent satisfaction rating.
- Engineered and published custom libraries and tools to accelerate and automate development process, making it accessible on GitHub as open-source resources for the developer community.
- Authored comprehensive visual documentation and practiced effective coding standards, enhancing code readability and expandability.

### **EDUCATION**

**BSc (Hons) in Software Development** 

2023 - Present

Technological University of Shannon

**Secondary School - Leaving Cert** 

2020 - 2023

New Millenium School, Bahrain (Central Board of Secondary Education)

#### **CERTIFICATES**

• Python Specialization Course – University of Michigan (Coursera) Nov 25, 2020

#### **PROJECTS**

## Dynamic Audio Based Enemy Al 2023 | C#, Unity, Blender

- Developed and deployed an audio driven AI system for a client, in Unity, enabling entities to dynamically "hear" movement generated audio through a spherecastbased detection system.
- Engineered an adaptive AI behavioral system that ensures different reactions for the enemies based on audio proximity, noise levels and distance to other entities.
- Optimized performance for multiple entities running this behavior by reducing unnecessary physics calculations and raycast checks.
- Received a 5-star rating from the client for efficiency and seamless integration as requested.

# Finite State Machine (FSM) Al System 2023 | C#, Unity, Blender

- Designed and implemented a Finite State Machine based enemy behavior system in Unity for a client, allowing enemies to dynamically switch between patrol, alert, searching and combat states using a Finite State Machine.
- Engineered a vision-based detection system to allow enemies to spot, track and engage players based on line-of-sight and noise cues.
- Implemented enemy patrol and combat flanking logic using NavMesh path-finding realistic combat scenarios.

## Password Management System Grade XII FYP - 2023 | Python, MySQL

- Developed a password management system using python and MySQL enabling secure storage and retrieval of login credentials.
- Designed a structured database schema to store usernames and passwords, ensuring efficient data handling and retrieval.
- Implemented user input validation to prevent incorrect data entry and ensure data integrity.
- Documented project structure, database schema and system functionality, making it easily understandable for future improvements.
- Developed a YouTube link-to-MP4/MP3 converter for an end-of-year school project, showcasing proficiency in Python programming, file handling, and user-friendly design principles.

## Youtube-To-MP4 Converter Grade XII FYP - 2023 | Python, MySQL

 Developed a YouTube link-to-MP4/MP3 converter for an end-of-year school project, showcasing proficiency in Python programming, file handling, and user-friendly design principles.