

Muhammad Umar

Programmer & QA Tester

Contact

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Portfolio:

<https://mumar1999.github.io/Portfolio>

Showcasing my projects

Education

BSC

Computer Games Technologies
University of Portsmouth
England, United Kingdom

BTEC

Information Technology and Computing
Croydon College
England, United Kingdom

GCSE

Hurlingham and Chelsea School
England, United Kingdom

Skills

Programming Languages: C++,
C#, HTML, CSS, JavaScript,
Bootstrap

Game Development: VR
programming, Gameplay
programming

Testing & QA: Smoke
testing, Sanity testing,
Functional testing

Soft Skills: Problem-
Solving, Communication,
Attention To Detail

About Me

I am a **gameplay programmer** with experience in **gameplay programming, VR development, front-end development, and quality assurance testing**. Passionate about crafting **immersive and interactive experiences**, I thrive on solving complex problems and optimizing gameplay mechanics.

Proficient in **C#, C++, HTML, CSS, and JavaScript**, I am currently expanding my skill set by learning **React and Node.js**. My goal is to contribute to the **games industry**, gaining hands-on experience while continuously enhancing my technical expertise.

A **curious and driven** developer, I continuously seek new technologies and refine my craft, aiming to create highly immersive and engaging gaming experiences.

Experience

Technical Support / Firmware Tester | Drunk Deer, Volunteer AUGUST 2023 – PRESENT

- Conduct comprehensive firmware testing using **smoke testing** to assess stability, **sanity testing** to verify critical functions, and **functional testing** to ensure compliance with firmware specifications.
- Act as a key liaison between customers and the development team, Diagnosed and reported firmware issues, contributing to a 70% improvement in system stability and user satisfaction.
- Collaborate closely with developers to troubleshoot and refine firmware, contributing to **continuous product improvement** through iterative testing and feedback loops.
- Help streamline the **customer experience** by addressing technical concerns efficiently, ensuring users have a seamless interaction with the product.

Projects

Gameplay Programmer | Lumbar Puncture, FundamentalVR

- Working with **fundamental SDK** to create a playable level.
- Incorporating **haptic feedback** using 3ds systems haptic pens.
- Using C# and prefabs to configure haptic feedback to mimic actual surgery procedure.
- Taking and implementing client feedback to add new feature to the level such as movable objects (e.g. scalpels, needles, anaesthetic cotton)
- Provided feedback on SDK usability, improving documentation clarity.

AI Programmer | AI Enemy NPC, Unreal Engine API

- Developed an **AI-driven** enemy NPC using **Unreal Engine's** built-in AI components, implementing **behaviour trees** for **intelligent movement** and **combat mechanics**.
- Combining vision and touch components from the unreal engine API.
- Programming the NPC to follow the player upon sight.
- Programming enemy attack mechanics and damage system.
- Programming player attack mechanics and damage system.
- Animating the enemy NPC to give it more life.
- Designed and implemented a UI system to display **dynamic health bars** for both enemies and the player.

Certifications/Online Course

- Completed 'The Complete Web Development Bootcamp' by Dr. Angela Yu, gaining hands-on experience in full-stack web development, including JavaScript, React, and Node.js.