

Mark Warren

Stoke-on-Trent, UK | +44 (0)7778191836 | mwarrenai@gmail.com
<https://www.linkedin.com/in/mwarrenai/> | <https://mwarrenai.github.io/>

Passionate Games Programmer specializing in C++, low-level systems, and gameplay logic. Backed by a Masters in Games Computing and a First Class Bachelors in AI/Robotics, I deliver maintainable, efficient code using Unreal Engine 5. Proven skills in debugging, technical communication, and collaborative problem-solving, with a unique foundation in AI systems like pathfinding and Minimax.

Technical Skills

Languages: C++, C#, Python, JavaScript, TypeScript, HTML, CSS

Game Engines: Unreal Engine 5, Unity, GameMaker, Game Systems Engineering

Web & Database: Node.js, Angular, React, AWS, MongoDB, SQL

Tools & Methods: Git/GitHub, Docker, Jenkins, Agile (Scrum/Kanban), Blender, LaTeX

Education

MSc Games Computing | University of Staffordshire | Anticipated: August 2026

Key Modules: Graphics Programming, Computer Science Applications for Games, Project Management and Research Methods, Game Master Project

BSc (Hons) Artificial Intelligence and Robotics | University of Staffordshire | Sept 2018 – July 2024 | First Class Honours

Key Modules: Final Year Project, Decision Analytics, Robotic Modelling and Drone Skin Design, Robotic Programming and Vision, AI and Chat Bots, Commercial Computing

Awards: Computing Department Prize for best overall performance; Star Mentor Award.

BTEC ND - IT Practitioners (Software Development) | York College | Sep 2007 - Jul 2009 | MMM

Work Experience

Student Demonstrator | University of Staffordshire | October 2025 – Present

- Debugged and resolved student code errors in C++, C#, and Python modules, translating complex bugs into understandable technical concepts to reduce lab time bottlenecks.
- Honed technical communication skills by demonstrating and explaining core programming concepts and systems logic, leading technical workshops, and contributing to knowledge transfer.
- Led organizational efforts for study groups and facilitated academic guidance, demonstrating teamwork and leadership applicable to Agile/Scrum project management.

Software Developer Intern | Airbus Helicopters | Oct 2021 – June 2022

- Automated data processing by converting a Visual Basic program to a JavaScript Google Spreadsheet, achieving a 25% reduction in processing time.
- Developed embedded aircraft system tools using C++ and Python on Raspberry Pi/Ubuntu; contributed to AI obstacle detection research.

Projects

Abyssal Heart (Unity): Side-scroller utilizing a novel bioluminescence feature for dynamic light/dark scene switching and puzzle mechanics. Won Best Art at GDS Welcome Jam 2025.

NoxPy (Python AI): Developed a strategic computer game, successfully implementing the Minimax algorithm to create challenging and fair adversarial AI decision-making.

Charlotte (C++): Designed and built an autonomous robot using VEX, Sonar, and Arduino for 2D navigation and metal detection, demonstrating core robotic programming and C++ debugging skills.