Mark Warren

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

MSc Games Computing student with a First Class in Artificial Intelligence and Robotics. C++/Unreal Engine 5 Developer focusing on real-time systems, Virtual Production, and VFX. Proven ability in high-performance systems engineering, pipeline integration, and collaborative Agile development. Strong foundation in low-level programming principles, C++, and Python for mission-critical and creative applications. Seeking to leverage robust academic and professional background to contribute to advanced rendering and systems development.

Technical Skills

Languages: C++, C#, Python, JavaScript, TypeScript
Web & Frameworks: Node.js, Angular, React, HTML, CSS
Tools & Methodologies: Git, GitHub, Docker, Jenkins, Agile (Scrum, Kanban)
Operating Systems: Windows, MacOS, Ubuntu
Cloud & Databases: AWS, MongoDB, SQL
Documentation: Microsoft Office Suite (Word, Excel, PowerPoint), LaTeX
Other: Unreal Engine 5, Unity, Adobe Photoshop, Figma, Blender, Autodesk Fusion

Work Experience

Back End Developer Intern | Patternologie Studio
May 2025 to July 2025
• Engineered and implemented server-side logic in JavaScript to support core application features.
• Contributed to the development and maintenance of the application's GUI, optimising components for performance and usability.
• Actively participated in Agile ceremonies to identify technical blockers and propose effective solutions, ensuring the project remained on schedule.
• Conducted rigorous testing to identify and resolve bugs before deployment, ensuring high application stability and reliability.

Software Developer Intern | Airbus Helicopters
Oct 2021 to June 2022
• Engineered and automated a data processing tool by converting a Visual Basic program to a JavaScript Google Spreadsheet, parsing NATO documents and achieving a 25% reduction in processing time.
• Developed aircraft system tools using C++ and Python on Raspberry Pi and Ubuntu Linux.
• Contributed to AI research initiatives focused on obstacle detection algorithms
• Proactively addressed technical challenges within a small team of four using Agile methodologies.

Education

Staffordshire University
MSc Games Computing | Anticipated: Aug 2026
• Gaining expertise in Graphics Programming, AI, and Game Systems Engineering for modern game development.
• Developing skills in project management, agile methodologies, and professional practices for the games industry.

Staffordshire University
BSc (Hons) Artificial Intelligence and Robotics - First Class Honours | Sep 2018 to Jul 2024
• Developed skills in Problem-solving, Programming, Data analysis, Smart Devices, Cloud Computing, Project Management and Robotic Development.
• Computing Department Prize for best overall performance on AI and Robotics.
• Star Mentor Award.

Prior Qualifications

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

Brayton Academy
Sept 2002 to July 2007
7 GCSEs A*-C (Including English and Maths)

Projects

• **Coded Fray:** An action-adventure game in a dystopian sci-fi world. My contributions focus on designing fast-paced, high-stakes gameplay that combines platforming, vehicular combat, and beat 'em up mechanics. The game's dark, cynical setting is balanced by a witty, satirical humour.
• **Abyssal Heart:** Side-scrolling adventure game utilizing a bioluminescence feature to dynamically switch light/dark scenes, central to puzzle-solving and environment exploration.
• **Life Is an Opportunity:** RPG adventure game focusing on narrative design and player quest progression within a unique exploration environment.
• **Revision App:** Created a mobile revision game featuring multiple-choice options and dynamic topic selection to improve student memory retention for assignments and exams.
• **Charlotte:** C++ project that developed an autonomous robot using VEX, Sonar, and Arduino for 2D navigation and metal detection.
• **NoxPy:** Developed a computer game in Python implementing a Minimax algorithm for strategic decision-making.
• **MP3 Head:** A collaborative project involving Blender and Fusion360 for 3D modelling and 3D printing to create a unique MP3 player casing.

Additional Experience

LivedX Research Participant | Staffordshire University Pedagogic Practice
Feb 2024 to Mar 2024
Participated in the pilot testing of the LivedX AI platform along with roughly 20 participants, documenting lived experiences to train the AI in recognising UK student assets and aligning them with graduate attributes. The program was for the University of Colorado's LivedX AI platform at Staffordshire University, adapting a US-developed system for UK student integration.
• Contributed up to 5 times a week with personal education experiences to train the AI platform.
• Documented and reflected on lived experiences, assisting in the alignment with graduate attributes.
• Provided usability feedback, enhancing platform adaptation and UI for UK students.

Volunteer STEM Ambassador and Mentor | Staffordshire University
Oct 2019 to Dec 2020
• Mentored students by providing academic and personal guidance, building rapport within the university community.
• Developed interpersonal and communication skills while assisting with the First Tech Challenge UK Robots competition.
• Demonstrated leadership by organising study groups and facilitating technical workshops.

Interests

• Motorcycles
• Outdoor Photography
• Design
• Energy efficiency
• Engineering