Mark Warren

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MSc Games Computing Student and C++/Unreal Engine 5 Developer with First Class Honors in AI and Robotics. Expertise in real-time systems, Virtual Production, and VFX. Excels in C++, pipeline integration, and Agile methodologies, seeking roles in advanced rendering and systems development.

Technical Skills
Languages: C++, C#, Python, JavaScript, TypeScript, HTML, CSS
Game Engines: Unreal Engine 5, Unity, GameMaker
Web & Cloud: Node.js, Angular, React, AWS, MongoDB, SQL
Tools & Methodologies: Git, GitHub, Docker, Jenkins, Agile (Scrum, Kanban), Blender, Autodesk Fusion, LaTeX, Adobe Photoshop

Work Experience
Back End Developer Intern | Patternologie Studio | May 2025 – July 2025
- Engineered robust server-side logic in JavaScript/Node.js; optimized GUI components for full-stack performance and usability.
- Engaged in Agile ceremonies, providing technical solutions and conducting rigorous unit testing to ensure high application stability.

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
- **Coded Fray (UE5/C++):** Engineered fast-paced gameplay systems (platforming, vehicular combat, beat 'em up) in Unreal Engine 5 using C++.
- **NoxPy (Python AI):** Developed a strategic computer game, implementing the Minimax algorithm for adversarial AI decision-making.
- **Abyssal Heart (Unity):** Side-scroller utilizing a bioluminescence feature for dynamic light/dark scene switching and puzzle mechanics.

Education
Staffordshire University
MSc Games Computing | Anticipated: August 2026
- Graphics Programming, AI, and Game Systems Engineering.

BSc (Hons) Artificial Intelligence and Robotics – First Class Honours | Sept 2018 – July 2024
- Awarded: Computing Department Prize for best overall performance; Star Mentor Award.

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

Additional Experience and Interests
LivedX Research Participant | Staffordshire University Pedagogic Practice | Feb 2024 to Mar 2024
- Contributed data and usability feedback to the LivedX AI platform for UK student integration

Volunteer STEM Ambassador and Mentor | Staffordshire University | Oct 2019 to Dec 2020
- Mentored students in the First Tech Challenge UK Robotics competition; facilitated technical workshops

Enjoys Lacrosse, Cooking, Photography, Movies, Creative Writing, Dungeons and Dragons, Board Games, Scuba Diving, Motorcycles, Art, Software Development and Robotics.