Aidan Webster

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EXPERIENCE

Iowa State University *Ames, IA*
Virtual Reality Software Engineer & Unity Developer *Sep 2021 – Present*

- Developed multiplayer VR training simulations using C# in Unity, contributing to a $250,000 DOT contract.
- Designed and implemented custom networking solutions using Photon Networking and C# to improve simulation stability and real-time performance.
- Refactored and optimized C# codebase, reducing runtime errors by 30% and increasing overall performance.
- Created and maintained MySQL databases for VR training programs, integrated with Unity via C#.
- Utilized Powershell scripts to automate server deployment and streamline development operations, saving 10+ hours of manual setup.
- Trained and mentored two junior engineers, ensuring code quality and best practices, particularly in C# coding standards.

RSPSMarket
Founder *Aug 2024 – Present*

- Engineered a .NET 8 Web API backend using C# and SQLServer, deployed on Microsoft Azure for CI/CD automation.
- Developed key features using C# to handle user authentication, peer-to-peer transactions, and secure payment processing via Stripe API.
- Designed and implemented frontend in Angular and TypeScript, interfacing with the .NET backend for seamless user experiences.
- Reduced server response times by 25% through C# code optimization and database query improvements.
- Led the architecture of the entire system, handling design decisions, deployment pipelines, and performance scaling.

Iowa State University *Ames, IA*
Graduate Research Assistant *May 2022 – Present*

- Designed and developed VR firefighter training modules using C# in Unity, focusing on simulation accuracy and performance optimization.
- Integrated advanced APIs, including ChatGPT and Whisper, into VR applications using C#, resulting in more interactive training scenarios.
- Conducted AI research in C#, collaborating with interdisciplinary teams to create innovative software solutions for digital assistance in VR training.
- Presented results at international tech conferences, showcasing C#-based solutions for improving public sector training tools.

SKILLS

TECHNICAL SKILLS

- **Languages**: C#, .NET, SQL, Python, C++, Rust
- **Frameworks/Tools**: Unity, .NET 8, Photon Networking, SQLServer, MySQL, Azure, REST APIs
- **Web Technologies**: Angular, TypeScript, HTML, CSS, Tailwind, NodeJS
- **Other**: Virtual Reality, XR Development, Powershell, CI/CD, Machine Learning (PyTorch, Scikit-learn)

SOFT SKILLS

- **Team Leadership & Mentorship**: Guided and trained junior developers, ensuring adherence to best practices and code quality standards, particularly in C# development.
- **Problem Solving & Critical Thinking**: Excelled at debugging complex issues in C# codebases, optimizing performance, and implementing scalable solutions in fast-paced, high-stakes environments.
- **Communication & Collaboration**: Effectively communicated technical concepts to non-technical stakeholders, and collaborated across interdisciplinary teams, ensuring alignment on project goals and timelines.
- **Adaptability & Learning**: Quickly adopted new frameworks, tools, and technologies such as .NET 8 and Azure, demonstrating an ability to thrive in rapidly changing technical landscapes.
- **Project Management & Organization**: Led full-stack projects from concept to deployment, maintaining organized development timelines and balancing multiple priorities without sacrificing quality.

EDUCATION

Iowa State University   *Ames, IA*
Master of Science, Human Computer Interaction & ABE   *June 2024*
- NIOSH Fellowship Grant Recipient
- University of Iowa Heartland Center Trainee

Iowa State University   *Ames, IA*
Bachelor of Science in Computer Science   *May 2022*
- Gaming and Esports Varsity Competitor