



Thomas Fisher

Senior Software Engineer

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SKILLS & TOOLS

LANGUAGES

C# | C++ | Java | JavaScript | SQL | HLSL | GLSL | ShaderLab | PowerShell | HTML | CSS | XAML | XML | XSLT | YAML

TOOLS & TECHNOLOGIES

.NET | Unity | OpenXR | DirectX12 | Mixed Reality Toolkit | Qt | WPF | Git | GitLab CI/CD | Docker | REST | NUnit | XUnit | Unity Test Framework | GoogleTest | Squish | JIRA | Confluence | Microsoft InTune | ArcGIS Maps SDK | Visual Studio | JetBrains IDEs

PLATFORMS

Windows | Linux | UWP | Android | Microsoft HoloLens | Meta Quest | Windows Mixed Reality

METHODOLOGIES & PRINCIPLES

Agile practices | Clean code principles | MVC | MVVM | Dependency injection | CI/CD

ADDITIONAL EXPERTISE

AR | VR | GIS | SDK Development | Graphics | Shaders | Machine Learning

SOFT SKILLS

Remote working | Collaboration | Project planning & scoping | Code & user documentation | Product demonstration

EDUCATION

2014 - 2018

SWANSEA UNIVERSITY

- Master of Engineering (MEng) in Computing
- First Class Honours overall as well as in every module
- Received an award for best overall performance in the Department of Computer Science

2012 - 2014

NEATH PORT TALBOT COLLEGE

- A Levels in Computing, Physics, and Mathematics
- AS Level in Further Mathematics

REFERENCES AVAILABLE UPON REQUEST

SUMMARY

Enthusiastic software engineer passionate about taking complex problems and transforming them into well-architected, maintainable code. With 6+ years commercial experience and 4 years academic experience in software development, I am proficient in a diverse set of programming languages and technologies, with a current primary focus on C# (.NET). Committed to continuously building on existing skills while developing new ones and keeping up with modern technologies and best practices. Comfortable collaborating and communicating within a team to achieve shared goals, and capable of leading software development projects and mentoring team members.

EXPERIENCE

Masters of Pie

Senior Software Developer

MAY 2021 - PRESENT
LONDON, UK (REMOTE)

- Helped to develop and maintain a .NET (C#) SDK for creating multi-user collaboration software. Played key role in application development utilizing this SDK (Unity, Mixed Reality Toolkit, GIS technologies), taking ownership of several major features.
- Top contributor on a critical project, with over 5000 commits, accounting for over 50% of overall commits.
- Devised and implemented bandwidth optimizations which reduced network bandwidth requirements for a multi-user XR application from ~21 kbps per user to ~4 kbps per user.
- Contributed to the implementation of OpenXR and physics support for in-house real-time graphics engine (C++, DirectX12, OpenXR).
- Mentored junior developers, providing guidance on best-practices, coding standards, and problem solving approaches.
- Introduced CI/CD automations and improvements which streamlined the development process, such as build caching options which reduced the time between a change push and build availability by up to 90%.
- Represented the company at events, defence sector exercises and client meetings, demonstrating software and providing technical support.
- SC clearance & DBS certificate obtained.

Rockfield

Software Developer

MAY 2018 - MAY 2021
SWANSEA, UK

- Major role in code design and implementation for Qt (C++) GUIs for geomechanics simulation setup and results analysis, integrating with in-house computational modelling software.
- Made improvements to legacy codebases, addressing technical debt and refactoring code for better maintainability.
- Implemented and maintained automated test suites (JavaScript, Squish), enabling regression detection without manual user testing.
- Quickly adapted to working within the complex and unfamiliar domain of geomechanics.

PROJECTS

AUGMENTED REALITY WAREHOUSE LOGISTICS TOOL

Master's Year Industry Project
OCT 2017 - MAY 2018

Industry collaboration project with Veeqo where as part of a small team, I produced a working prototype of an AR tool (using C#, Unity, REST API integrations) for a custom Android-based scanner device for improving the workflow of e-commerce warehouse operations.

GENETIC ALGORITHMS FOR VIDEO GAME AI

Master's Year Individual Project
JUL 2017 - MAY 2018

Developed a video game in Unity (C#) which utilised genetic algorithms as a mechanism to improve the performance of enemy bots over successive evolution stages while playing. Included development of the concept as well as design, implementation, testing, and documentation of the software.

GENERIC NEURAL NETWORK IMPLEMENTATION IN C++

3rd Year Project
JUL 2016 - MAY 2017

Implemented an object-oriented backpropagation neural network architecture in C++, exploring the mathematics behind deep neural networks. For concept demonstration at project fair, a model was trained to reproduce the output of logic gates with >99.9% accuracy.