



# Thomas Fisher

Senior Software Engineer

- +447768117380
- t.d.fisher.se@gmail.com
- Swansea, United Kingdom
- thomasfisherse.github.io
- linkedin.com/in/thomasfisherse/

## 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.
- NATO Secret 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.