Aki Wainwright

Portfolio | LinkedIn | s.aki.w@proton.me | Based in London, flexible to relocate

Profile

First-Class Computer Games Development graduate with strong C++/C# skills, hands-on experience in game and network programming, and a proven ability to solve complex problems in team settings. Eager to contribute technical expertise and a passion for continuous learning to a software development role.

Skills

- **Programming**: C++, C#, Python, Object-Oriented Programming, Testing & Debugging, Problem solving
- **Software**: VSCode, WPF, OpenGL, Linux (Fedora, Arch)
- **Project Management:** GitHub, Agile Scrum (Sprint)
- **Soft skill:** Japanese (Fluent) , Adaptability, Communication, Team Work, Time Management

Education

Staffordshire University 2020 - 2023

Bachelor's degree in Computer Games Development - 1st Class

- Applied AI, networking (TCP/UDP), and concurrent programming concepts in C++/C# projects using GitHub for version control.
- Utilised object oriented programming across all projects
- Gained hands-on experience on different IDEs such as Visual Studio, VSCode, JetBrains (CLion, Rider) and the utilities they provide to help with debugging.

Projects

Chat server with rock paper scissors - *Used C# and WPF*

- Implemented network communication using UDP for data such as images and TCP for sending encrypted text messages.
- Using multi-threading and concurrent programming to develop a pseudo lobby system for users to play rock paper scissors.
- Enabled private and public chat functionality through key character inputs preceding the message.
- Built a login system requiring users to set up a profile with a password utilising classes for users.
- Gained practical experience with concurrent programming and core network programming principles.

Endless runner style game — *Using C++ and OpenGL*

- Implemented object pooling to optimize performance and reduce memory overhead.
- Setup an object-loader by reading text files to get model data
- Applied thorough testing and debugging throughout development to resolve issues and improve stability.
- Managed project version control using GitHub for collaboration and backup.
- Learned the importance of prototyping and iterative testing in game development.
- Gained hands-on experience with the graphical development pipeline, including asset creation and loading.

Built my own PC — *Operating systems Windows, Linux(arch and nobara (Fedora))*

- Used unix while using Linux through the terminal to update the system and install new packages as well as managing user permissions.
- Gained a better understanding how hardware components work, for example CPU CL times to optimise an amd cpu with ram.
- Ran Windows through a virtual machine to see how performance is different to running windows natively