

AYBIKE KILIC

aybikekilic7@gmail.com | <https://www.linkedin.com/in/akilic/> | <https://github.com/akilic9> | <https://euruss.itch.io/>

ABOUT ME

Enthusiastic software developer keen on learning, unlearning and relearning. A good team player who enjoys challenges and overcoming them. An analytical thinker with good problem-solving skills. Worked with C++ for desktop applications, familiar with commonly used game engines and APIs.

Portfolio: www.aybike-kilic.com

Technical Skills: C++, C#, Unity, OpenGL, Vulkan, Qt, Visual Studio, Git, Dear ImGui.

WORK EXPERIENCE

Programming Mentee | Ubisoft Leamington, UK

10/2023 – 01/2024

- Using the provided **C++** API, developed a game from scratch under guidance of an expert programmer.
- Explored concepts such as finite state machines, collision detection and handling, object pooling, artificial intelligence pathfinding, entity-component systems, object-component systems.
- Applied design patterns and commonly used algorithms in game development.

Software Engineer | Simsoft Information Technologies, Turkey

06/2022 – 06/2023

- Mainly used **C++** and Qt as programmer.
- Maintained and developed ship bridge simulation software, working on a large code base.
- Took part in architectural design of new features. Came up with ideas for robust, reusable and scalable code structure.
- Took ownership of features. Designed, implemented and maintained whole components of simulation. At times, acted as sole maintainer of products.
- Conducted presentations on development state, design and architecture of new features.
- Performed under high pressure during deployment and patching of product with fast debugging and bug fixing.
- Mentored and assisted newcomers in getting familiar with the technology, code base and environment.
- Instructed and trained interns on implementing features.

Software Engineering Intern | Simsoft Information Technologies, Turkey

01/2022 – 05/2022

- Worked with **C++** and Qt on ship bridge simulation software.
- Took responsibility for a different development area when team was short staffed. Took over interface design and development, learned and used new a language (QML) in short time to ensure project's success.
- Performed tests on client hardware, analysed performance and presented findings to team.
- Created scripts to automate installation tasks on client hardware.
- Performed at a developer level, quickly adapted to codebase and environment.
- Started making contributions to code within a week of joining.

PROJECTS

Custom Vulkan Render Engine (C++/Vulkan)

07/2024 – 10/2024

- Developed a mini render engine with **C++** and **Vulkan** as part of my dissertation.
- Implemented fundamental rendering pipelines, 3D space camera, 3D model loading with textures and point lights using Blinn-Phong lighting model.

Battle City Remake with Custom Engine (C++/SFML)

02/2024 – 05/2024

- Building a custom 2D engine from scratch using **C++** and SFML. Using this engine, making my own version of the 80s game Battle City.

- Implemented core game loop, state machines, data-driven design for resource management and maps, input manager using callbacks, collision detection and handling.

Monza Run (C++/OpenGL)

02/2024 – 05/2024

- Made a 3D racing game with **C++/OpenGL**.
- Implemented primitive shapes, texture mapping, collision detection and handling, camera techniques (1st person, 3rd person, cinematic, top-down), lighting and HUD. Created a track and terrain using splines.

Numerous Game Jams (C#/Unity)

2021 – Ongoing

- Enjoy participating in game jams whenever possible.
- Published games for 9 game jams using **Unity** and **C#**.
- Met and worked with people from different countries and disciplines, honed soft skills as well as technical skills.
- Specifically proud of Nightwatch and Beware the Mines.
- Nightwatch: Required a complex system of interactables, inventory and objectives, was an enjoyable challenge.
- Beware the Mines: Led and had full responsibility for programming. Implemented the gameplay and AI enemy behaviour in 48 hours.

EDUCATION

City, University of London, UK

MSc Computer Games Technology (Distinction)

2023-2024

- Key modules: Dissertation (C++/Vulkan), Computer Games Architectures (C++/SFML), Computer Graphics (C++/OpenGL), OOP in C++, Advanced Games Technology (C++/OpenGL), Games Development Process (C#/Unity), VR Development (C#/Unity).

Istanbul Okan University, Turkey

BSc Computer Engineering (3.2/4.0)

2018-2022

- Key modules: Software Engineering, Data Structures, Algorithm Analysis.
- Member of Computer Engineering Society and Children's Rights Society.
- Received scholarship for success in university entrance exams.