# **AYBIKE KILIC**

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### **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, 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 a ship bridge simulation, working on a big code base that sized ~30GB.
- Performed code refactoring and optimization to improve performance.
- Partnered with senior engineers to apply best practices and write clean, reliable, reusable code.
- Took part in architectural design of new features.
- Discussed technical strategies with senior engineers and managers.
- Conducted presentations on development state, design and architecture of new features.
- Performed well under high pressure during deployment and patching of product with debugging and bug fixing.
- Mentored and assisted newcomers in getting familiar with the technology, code base and environment.
- Instructed interns on implementing features.

## **Software Engineering Intern | Simsoft Information Technologies, Turkey**

01/2022 - 05/2022

- Worked with **C++** and Qt on a 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 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.
- Made presentations about the product as part of marketing/public relations.
- Performed at a developer level, quickly adapted to codebase and environment.
- Started making contributions to code within a week of joining.

### **PROJECTS**

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

09/2023 - Ongoing

- 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)

09/2023 - 05/2023

- Made a 3D racing game with C++/OpenGL.
- Implemented primitive shapes, texture mapping, collision detection and handling, different camera techniques (1<sup>st</sup> person, 3<sup>rd</sup> 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 8 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**

2023-2024

 Key modules: 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.