# **Game Programmer resume**

## **Support Division**

Support Position: Client Development

## **Personal Information**

Name: Dongwoong Han Date of birth: July 30, 1993

Address: Bangbae-dong, Seocho-gu, Seoul

Military service: Army sergeant discharge (January 13th ~ November 14th)

Contact: 82 010-7507-7653



## **Educational History**

2009.03 – 2012.02 Graduated from Sangmun High School

2012.03 – 2019.02 Graduated from Soongsil University's Computer Science Department, Media Department, Double Major

## **Core competencies**

- Object Oriented Programming C/C++/C#
- Implement and understand the game engine architecture
- Data structure, algorithm
- Unity3D, UE4 engine programming
- Use of configuration management tools
- Computer Science, Responding to memory related issues, multi-threaded program0 ming
  - Object pooling, UI management

portfolios	Field of experience	OS / FrameWork
1. Unreal Engine 4 MiniRPG	-Unreal Engine 4	OS : Windows
	-AnimationBP, BlendSpace, Al_BT, AnimMontage	Frame Work :
Video YouTube Link :	-Unreal C++, Unreal BluePrint	Unreal Engine4
https://www.youtube.com/watch	-UMG, LevelSquence	
?v=bPIP28Y1x0I&feature=youtu.	-Character movement and combat logic	
<u>be</u>	implementation	
Source Code GitHub Link :	-Realization of battle with monster Al	
https://github.com/donnyh0730/		
<u>UnrealMiniRPG</u>		
2. Personal game engine	-WinAPI	OS : Windows
architecture design project	-Graphics pipeline	Frame Work :
(GitHub link)	-Component-based class design	Direct3d11
https://github.com/donnyh0730/	-Third party interworking with debug system,	
MyGameEngine	-Software main loop, GUI system interlock	
<u>y sae2.ige</u>		
3. VR game portfolio developed	-Unity3D,	OS : Windows
while undergraduate (video)	-Unity VR engine framework	Frame Work:
	-LeapMotion Api	Unity3d
https://www.youtube.com/watch	-Design and implementation of overall client game	 
?v=LWHPMdlNft4&t	logic	
4. Bluehole duties	-Unity	OS : Windows
(video)	-Server client logic	Frame Work:
1편	-Implementation of automation tools	Unity3d
https://www.youtube.com/watch	-UI animation	
?v=Q27-LF2IcWk	-Replay system design and implementation	i i i
2편		
https://www.youtube.com/watch		
?v=VjG1QTgAPkl&t		

# Introduction my work skills

## 1. Programming language C/C++/C#

Create efficient code by using pointers, STL, data structures, and libraries for the language with a high degree of understanding. By applying asynchronous programming and multithreaded programming techniques, you can write programs that use computer resources efficiently.

## 2. Object Oriented Programming

Design and implement classes using an object-oriented language, and write useful codes using frameworks and libraries, apply design patterns by designing an object-oriented class, and make the code in a structure that is logically aligned and easy to maintain. Make up. Rather than writing all the logic in one file, it applies the characteristics of each object, and applies various design patterns such as observers, singletons, factories, facades, etc.

#### 3. Data structure and algorithm

Have a high understanding of data structures and can use STL and can be applied to problem solving. Also, I am interested in the area of mathematics called algorithms, so I can construct logical codes.

## 4. Unity3D, UE4 engine programming

Create a client application using the engine framework. Various game logic, collision processing, state pattern implementation, animation blending, NPC AI implementation, etc., necessary for the client can be implemented.

#### 5. Configuration management

SVN, Perforce, and Git are used, and basic source commit (upload), pull-down (download), edit, and merge operations are possible.

#### 6. Computer Science

I have knowledge of memory optimization and rendering pipeline optimization to develop client applications, and I can use them to apply optimizations when developing solutions.

# Experience [total 1 year 0 months] (tasks and achievements)

## 1.

Company Name	Department	employment period	rank
Krafton	PUBG	2019.06 ~ 2019.09	Intern

## **Technical section summary**

-Development Framework: Unreal Engine4

-Development language: C++

-Source management: SVN,perforce

#### **Detail**

#### [Roll]

I participated as a client development intern and did bugfixes and new development of the Battleground client written with UnrealEngine 4.12. I mainly worked on fixing bugs that occurred on the UI side, and transferring logic that was previously written in UnrealEngine Blueprint to C++.

The broadcast of the Battleground Esport League was broadcast using UnrealEngine's SpectatorPawn, but the task of developing a new function was to use the observer's movement as a more convenient interface for the broadcast team to use. The function to control the observer's speed by receiving the input key and to prevent the scene from passing through the wall by moving at a slow speed indoors, and to allow the observer to adjust the speed value finely so that the observer can catch the movement of the athletes in various terrain features. I implemented the function.

In addition, using Unreal Engine's dedicated server replication, we implemented a function that allows various UIs to be displayed in synchronization on the broadcast screen.

## 2.

Company Name	Department	employment period	rank
Krafton	Dilussion Studio	2019.10 ~ 2020.06	employee

## **Technical section summary**

-Development Framework: Unity3d 2019.4.x

-Development language: C#

-Source management: Git

#### **Detail**

#### [Roll]

After my internship at PUBG was over, I started to develop mobile games at Dilujeon Studio through Krafton's in-house transfer.

It was a mobile RTS game, mainly responsible for in-game UI and automation tool development and modification. As you can see in the video link above, the tasks I was in charge of were supporting UI animation and data loading on the server, and the task of smoothly processing them.

Among the contents that I have developed myself, I have developed a replay system. It was a replay editing system that allows you to directly create an explanation video of the unit to be used in the UI, and can be used in various ways in some cases. It was a tool that saved the Event that the user caused in Gain in Unity's FixedUpdate frame in the form of data, saved in Json format, and loaded and saved it.

The interface was implemented as if editing a video directly, and both the planning and implementation were done by hand. In the event-based RTS game, replay was a frequently used client function, so I wanted to introduce it, so I implemented it. Also, the read Json data was parsed into the container to read the information about the event occurrence every frame as it is and make an event call. It was designed to be driven.

Foreinge language skill

[English]

**TOEIC 705 points** 

Reading: High / Conversation: Middle / Writing: Middle

About Me

[Character introduction]

I think about everything positively and always take responsibility for my job and try to make

it fun. I always try to maintain a good relationship with someone I've dated. I remembered

the words of the people around me, saying that being together always keeps you from losing

laughter. We strive to become a person who thinks once more before acting.

[Growing up as an undergraduate developer]

During my undergraduate years, I gained knowledge about software development by

majoring in Computer Science and Computer Media. Since then, from the time I participated

as a game developer at the career vocational fair hosted by the faculty, I liked making games,

and at the fair, I operated a developer booth with VR Starcraft, a game I made myself. This

game was very responsive to the kids. And in recognition of such contributions, I have been

awarded an undergraduate mentoring scholarship.