

# SangHyeok Hong

+82-010-2821-3356

Email: [tkdgur4427@gmail.com](mailto:tkdgur4427@gmail.com) Homepage: <https://tkdgur4427.github.io/>

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## SUMMARY

Proficient graphics/engine programmer looking for an opportunity to develop memorable game

## TECHINCAL SKILLS

### Languages

- Proficient in: C / C++ / C# / Assembler

### Graphics

- Proficient in: DirectX9 / DirectX11 / DirectX12 / Gnm(PS4) / DirectX11\_x (Xbox One) / OpenGL

### Architecture

- Multi-threaded game engine development
- Multiplatform and multi-threaded renderer development (in PC, PS4 and Xbox One)
- Cooking and Content pipeline management system development
- Continuous Integration (CI) Build System development for multiple platforms

## PROFESSIONAL SKILLS

- Experience for complete game development as porting PC game to console from scratch
- Efficient time-management
- Self-motivative developer to seek for endless learning

## EMPLOYMENT

### Engine Programmer

2016.03-Present

TERA,Bluehole.

- Worked as an engine programmer for the TERA Console Porting Project
- Lead the project as Technical Director from the beginning of the project
- Porting TERA from old UE3 to up-to-date UE3 (we called UE3.5)
- Porting TERA to Consoles (PS4 and Xbox One)
- Designed and re-implemented UE3 rendering pipeline into multi-threaded rendering supporting multi-core policy in the Console
- Implemented the Multi-Threaded Memory Manager to speed up for allocating CPU and GPU memory
- Refactored and optimized Asyncloading IO system in TERA
- Re-implemented Scaleform to supporting UI resource async-loading in UE3.5 and refactored to support multi-threading in logic and render
- Implemented Content and Cooking Pipeline for the consoles in existing CI (Continuous Integration) PC Build System
- Integrate Bink2, Speed Tree and Coherent GT (Web UI) for consoles
- Designed and Implemented the platform-dependent rendering layers for PS4 (Gnm) and Xbox One (DirectX11-x) for multi-threaded rendering
- Optimize the overall rendering pipeline for consoles
- Optimize the Particle System in UE3
- Supported UI scriptors to optimize ActionScripts by providing profiler tools

### Client Programmer

2015.04-2016.03

TERA,Bluehole.

- Worked as a client programmer
- Implement additional features for live-contents in TERA
- Maintained the content pipeline including content cooking
- Maintained in-house customized UE3 engine tools
- Optimized the Scaleform logic and rendering and give the direction of optimization to UI scriptors
- Optimized performance of Battle Field content in TERA

## EDUCATION

### DigiPen Institute of Technology

Graduation Date: April 2015

Master of Science in Computer Science

### DigiPen Institute of Technology

Graduation Date: December 2012

Bachelor of Science in Computer Science, Real-Time Interactive Simulation