

GAME PROGRAMMER · ENGINE ENGINEER · DEVELOPER · LECTURER

617, Sampyeong-dong, Bundang-gu, Seongnam-si, South Korea

Work Experience _____

Tech Lead Seoul, South Korea

EJN CORPORATE Dec 2023 - Jun 2024

- Manage development teams by meeting 1 on 1 regularly and discussing technical decisions and determining direction
- Develop new project (Unannounced)

Engine Engineer Seoul, South Korea

MOMENTI KOREA Aug 2021 - Nov 2023

- Develop cross-platform engine for making and playing interactive media using Rust
- Create and deploy Swift APIs for use in iOS apps
- Create and deploy Elixir APIs for use in backend
- Transfile and deploy WebAssembly for use in web browsers

Game Programmer

Seongnam-si, South Korea

NEXON KOREA Sep 2015 - Jul 2021

- Update build system by upgrading IDE version (Visual Studio 2008 → Visual Studio 2015)
- Develop physics engine for 64-bit application build (Havok Physics → NVIDIA PhysX)
- Develop many contents such as 'Depart for Battle', 'Quick Departure', 'Pet Book', 'Partholon Vanguard' and 'Friendship System'
- Develop raid 'Macha' and character 'Tessa'
- Improve facial system by facing-related elements to automatically change based on scale value
- Maintain and manage Korea live server

Projects _____

DEVELOPERMay 2017 - Present

- Implemented Hearthstone simulator for reinforcement learning using C++17
- Wrote extensive unit test to check each card's effect

CubbyFlow CubbyFlow/CubbyFlow

DEVELOPER Apr 2018 - Present

- Voxel-based fluid simulation engine for computer games using C++17
- Wrote detailed documentation and tests/benchmarks for the library and published it on GitHub

DEVELOPER Apr 2018 - Present

- Implemented Baba Is You simulator for reinforcement learning using C++17 $\,$
- Worked Python API support for convenience use and benchmarked by using DQN

CONTRIBUTOR Sep 2021 - Nov 2022

- Rust implementation of Reactive Extensions
- Implemented WebAssembly support
- Implemented several core features such as 'BehaviorSubject', 'WithLatestFrom' and 'StartsWith'

Skills

Languages C++, Rust, C#, Python

Spoken Languages Korean, English, Japanese

Programs Visual Studio, Visual Studio Code, RustRover, GitKraken, Word

2024-07-09 CHRIS OHK · RÉSUMÉ 1

Education

KAIST Daejeon, South Korea

M.S. IN COMPUTER SCIENCE Mar 2013 - Aug 2015

Kyungpook National University

Daegu, South Korea

B.S. IN COMPUTER SCIENCE AND ENGINEERING Mar 2008 - Feb 2013

Honors and Awards

Microsoft MVP (Most Valuable Professionals)

Microsoft

CATEGORY: DEVELOPER TECHNOLOGIES

2015 - Present

ACM-ICPC 2012 Daejeon Regional

Ministry of Future Creation and Science, NIA

HONORABLE MENTION 2012

1st TOPCIT Competition Korea Ministry of Science and ICT, NIPA

SPECIAL PRIZE 2012

Translations _

Optimized C++ Hanbit Media

C++ 최적화 Jul 2019

Discovering Modern C++ Gilbut

모던 C++ 입문 Dec 2017

Rust Essentials Hanbit Media

러스트 핵심 노트 Feb 2017

Programming 2D Games Acorn Publishing

2D 게임 프로그래밍 Nov 2014

Unity Shaders and Effects Cookbook Acorn Publishing

유니티 SHADER와 EFFECT 제작 Apr 2014

GameSalad Beginner's Guide Acorn Publishing

게임샐러드로 코드 한 줄 없이 게임 만들기 Jul 2013

Communities and Studies

C++ Korea **Voluntary Association**

Nov 2013 - Present FOUNDER AND ADMINISTRATOR

- A Facebook community that uses C++ language and shares related information
- Translate "C++ Core Guidelines" to Korean
- Host seminars, meetups and studies periodically
- 6000+@ members

Reinforcement Learning KR

Facebook Community

Jan 2021 - Present **ADMINISTRATOR**

- Review a variety of papers, from DQN to state-of-the-art papers introduced in the latest conferences
- Present and discuss 2 papers per week
- 100+@ papers
- 100+@ members

Reinforcement Learning Paper Study

Online

ADMINISTRATOR May 2020 - Apr 2023

- A Facebook community that researches reinforcement learning and shares related information
- Host meetups and studies periodically
- 6000+@ members

Teaching	
Rust Basic + Linux Kernel Development HSPACE	Seoul, South Korea Jul 2024 - Present
Rust Basic + Cross-platform Application Development SEOUL NATIONAL UNIVERSITY - SCSC + WAFFLESTUDIO	Seoul, South Korea Mar 2024 - Present
Rust Basic + Rogue-like Game Development Konkuk University - GDSC Konkuk + EDGE	Seoul, South Korea Mar 2024 - Present
Rust Basic + Make a Blog Korea University - MatKor	Seoul, South Korea Mar 2024 - Present
Rust Basic + Make a Minecraft UNIST - HEXA	Ulsan, South Korea Jan 2023 - Present
Rustonomicon at a Glance Korea University - MatKor	Seoul, South Korea Dec 2023 - Feb 2024
Rust Basic + Backend Development Korea University - GDSC KU	Seoul, South Korea Sep 2022 - Sep 2023
Rust Basic + Make an Interpreter Korea University - MatKor	Seoul, South Korea Mar 2023 - Aug 2023
Rainbow Is All You Need Daegu Software Meister High School	Daegu, South Korea Oct 2021
Reinforcement Learning Basic UNIST - HEXA	Ulsan, South Korea Jul 2021 - Sep 2021
Artificial Intelligence Go with AlphaGo and AlphaGo Zero KAIST - INCLUDE	Daejeon, South Korea Mar 2021 - Jul 2021
Artificial Intelligence Go with AlphaGo Zero 2020 WINTER OSS DEVELOPER FORUM CAMP	Seoul, South Korea Jan 2020
Reinforcement Learning Basic 2019 SUMMER OSS DEVELOPER FORUM CAMP	Seoul, South Korea
Presentation	
C++ Korea Meetup A Quick Look of C++ Concurrency	Seoul, South Korea Jun 2024
2024 Softeer Tech Meetup Why is Rust on the Rise + Introduction to Rust's Key Features	Seoul, South Korea Jun 2024

2019 SUMMER OSS DEVELOPER FORUM CAMP	Jul 2019
Presentation	
C++ Korea Meetup A Quick Look of C++ Concurrency	Seoul, South Korea Jun 2024
2024 Softeer Tech Meetup Why is Rust on the Rise + Introduction to Rust's Key Features	Seoul, South Korea Jun 2024
4th DevTalk Seminar - Hongik University, Computer Engineering LEAP FROM COLLEGE STUDENT TO DEVELOPER	Seoul, South Korea Mar 2024
Cloud Native Sustainability Week in Seoul Can Rust Save the Earth?	Seoul, South Korea Oct 2023
C++ Korea Meetup GAME DEVELOPMENT WITHOUT USING CLASS	Seoul, South Korea Jun 2023
C++ Korea Meetup Direction of C++ Education for Beginners	Seoul, South Korea Feb 2023
ModuLabs MODUPOP	Seoul, South Korea

Dec 2022

DEVELOPERS' REINFORCEMENT LEARNING

INFCON 2022 Seoul, South Korea **RUST CROSS-PLATFORM PROGRAMMING** Aug 2022 **Korea University, Dept of CSE - Special Lecture** Seoul, South Korea THINGS I WISH I'D KNOWN IN COLLEGE Jun 2022 **44BITS Potcast Live** Online 5 YEARS OF HEARTHSTONE DEVELOPMENT Mar 2022 Taling Monthly Code Reivew Ver 0.1 Online **GROWING AN OPEN SOURCE PROJECT** Oct 2021 72th AiFrenz Seminar Online REINFORCEMENT LEARNING ENVIRONMENT DEVELOPMENT May 2021 **Jeonbuk Science High School - Special Lecture** Online CREATE AN ARTIFICIAL NEURAL NETWORK USING PYTHON May 2021 2020 OSS Festival Online MANAGING AN OPEN SOURCE PROJECT (COMMUNITY) WELL Nov 2020 **GitHub in DevOps Meetup 2020** Online THE JOURNEY FROM OPEN SOURCE TO INNER SOURCE Nov 2020 7th C++ Korea Seminar Online GAME DEVELOPMENT WITHOUT USING POINTER Jul 2020 6th C++ Korea Seminar Seoul, South Korea C++ OPEN SOURCE 101 Sep 2019 **GDG Campus Seoul - Toy Story** Seongnam-si, South Korea TRIAL AND ERROR FOR A SUSTAINABLE SIDE PROJECT Jul 2019 **Nexon Developer Conference 2019** Seongnam-si, South Korea EXPERIENCE IN DEVELOPING HEARTHSTONE REINFORCEMENT LEARNING ENVIRONMENT Apr 2019 5th C++ Korea Seminar Seoul, South Korea C++20 KEY FEATURES SUMMARY Apr 2019 **Meltingcon 2018** Seoul, South Korea CREATE PYTHON API USING C++ May 2018 **Nexon Developer Conference 2018** Seongnam-si, South Korea EXPERIENCE IN DEVELOPING FLUID SIMULATION ENGINE Apr 2018 **16th Hacking Camp** Seoul, South Korea C++ SECURE CODING GUIDE Aug 2017 3rd C++ Korea Seminar Seoul, South Korea New C++ in a New Visual Studio, a Migration Story Feb 2017 2nd C++ Korea Seminar Seoul, South Korea C++17 KEY FEATURES SUMMARY May 2016 **Microsoft Techdays Korea 2015** Seoul, South Korea GREASE RUSTY OLD C++ CODE WITH MODERN C++ Oct 2015 1st C++ Korea Seminar Seongnam-si, South Korea C++11 Key Features Summary Dec. 2014