Chris **Ohk**

GAME PROGRAMMER · ENGINE ENGINEER · DEVELOPER · LECTURER

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Work Experience

Embedded Software Engineer
42DOT

Seongnam-si, South Korea
Sep 2024 - Present

- **Develop something using Rust (Secret)**

Tech Lead
EJN CORPORATE

Seoul, South Korea
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
MOMENTI KOREA

Seoul, South 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
NEXON KOREA

Seongnam-si, South 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

RosettaStone
DEVELOPER

⭘ utilForever/RosettaStone
May 2017 - Present

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

CubbyFlow
DEVELOPER

⭘ CubbyFlow/CubbyFlow
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

baba-is-auto
DEVELOPER

⭘ utilForever/baba-is-auto
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

rxRust
CONTRIBUTOR

⭘ rxRust/rxRust
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

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
Founder and Administrator   Nov 2013 - Present

- 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
Administrator   Jan 2021 - Present

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

Reinforcement Learning Paper Study Online
Administrator May 2020 - Apr 2023

- 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

Teaching

Rust Basic + Linux Kernel Development Seoul, South Korea
HSPACE Jul 2024 - Present

Rust Basic + Cross-platform Application Development Seoul, South Korea
Seoul National University - SCSC + Wafflestudio Mar 2024 - Present

Rust Basic + Rogue-like Game Development Seoul, South Korea
Konkuk University - GDSC Konkuk + EDGE Mar 2024 - Present

Rust Basic + Make a Blog Seoul, South Korea
Korea University - MatKor Mar 2024 - Present

Rust Basic + Make a Minecraft Ulsan, South Korea
UNIST - HeXA Jan 2023 - Present

Rustonomicon at a Glance Seoul, South Korea
Korea University - MatKor Dec 2023 - Feb 2024

Rust Basic + Backend Development Seoul, South Korea
Korea University - GDSC KU Sep 2022 - Sep 2023

Rust Basic + Make an Interpreter Seoul, South Korea
Korea University - MatKor Mar 2023 - Aug 2023

Rainbow Is All You Need Daegu, South Korea
Daegu Software Meister High School Oct 2021

Reinforcement Learning Basic Ulsan, South Korea
UNIST - HeXA Jul 2021 - Sep 2021

Artificial Intelligence Go with AlphaGo and AlphaGo Zero Daejeon, South Korea
KAIST - Include Mar 2021 - Jul 2021

Artificial Intelligence Go with AlphaGo Zero Seoul, South Korea
2020 Winter OSS Developer Forum Camp Jan 2020

Reinforcement Learning Basic Seoul, South Korea
2019 Summer OSS Developer Forum Camp Jul 2019

Presentation

C++ Korea Meetup Seoul, South Korea
A Quick Look of C++ Concurrency Jun 2024

2024 Softeer Tech Meetup Seoul, South Korea
Why is Rust on the Rise + Introduction to Rust's Key Features Jun 2024

4th DevTalk Seminar - Hongik University, Computer Engineering Seoul, South Korea
Leap from College Student to Developer Mar 2024

Cloud Native Sustainability Week in Seoul Seoul, South Korea
Can Rust Save the Earth? Oct 2023

C++ Korea Meetup Seoul, South Korea
Game Development without using Class Jun 2023

C++ Korea Meetup   Seoul, South Korea
Direction of C++ Education for Beginners   Feb 2023

ModuLabs MODUPOP   Seoul, South Korea
Developers' Reinforcement Learning   Dec 2022

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