

JUNHA YANG

CONTACT

email junhayang1@gmail.com
homepage <https://junha1.xyz> (under construction)
github <https://github.com/junha1>

INTRODUCTION

I am a software developer who's quite experienced in leading a software project. I believe a sound system can be built even with restricted business resources if well-structured abstraction and principled design are followed.

EDUCATION

2016-current Pohang University of Science and Technology
Bachelor of Computer Science and Engineering (GPA: 4.05/4.3)

INTERESTS

System Programming

concurrency · asynchrony · networks · WASM

Blockchain

consensus · inter-blockchain communication · light client · scalability

Cryptocurrency and Decentralization

DApp · DeFi · NFT · Web3

Computer Graphics

realtime rendering · global illumination · OpenGL

SKILLS

Languages

Rust, Modern C++, Python

Frameworks and Protocols

Tokio, OpenGL, Cosmos SDK, Amazon Web Services

WORK EXPERIENCES

2021-2022 **Hyperithm** Infrastructure Team Head · Full-time

Hyperithm is a cryptocurrency trading firm. I contributed in building a trading Infrastructure.

- Was in charge of the entire infrastructure of the firm, including AWS and firm's various realtime products.
- Launched a new trading system which provides fast, abstracted and asynchronous data access to various crypto exchanges.
- Launched a new strategy operation platform which provides a trading strategy runtime and an instance management system.

2019-2021 **Kodebox** Core Engineer · Full-time

Kodebox develops and maintains the CodeChain Foundry project, which is an open-source layer-1 blockchain solution based on Tendermint and Rust. I contributed in the overall development of the project.

- Developed a blockchain framework [Codechain Foundry](#).
- Implemented Inter-Blockchain Communication (IBC) protocol modules for Codechain Foundry ([article](#)).
- Developed a Rust remote method invocation library called [remote-trait-object](#).

2018 **Netmarble** AI Researcher · Intern

Netmarble is a mobile game development and publishing company. I worked as an intern for the AI research center.

- Developed a system detecting abusers in MMORPG games, using an RNN trained with massive game logs.

PROJECTS

2022-current **PDAO** Founder · [Link](#)

A university-oriented DAO (Decentralized Autonomous Organization) for an education, research and alumni networking purpose. I am the founder of this organization.

- Operates a community for students and alumni.
- Provides seminars of various topics in blockchain.
- Currently works on DAO structure, tokenomics, and contract development for the official launch on the Terra chain.

2019-current **fere** Main developer · [Link](#)

A realtime 3D rendering engine built on top of OpenGL, in Rust.

- Consists of a high-level abstracted layer defining a set of operations, and an engine that takes a stream of operations and renders it.
- Supports essential lighting and shading functionalities such as PBR, shadow, and etc.
- Supports irradiance volume as a global illumination method.
- Can record the framebuffer and encode to a video using ffmpeg.

2021 **serde-tc** Main developer · [Link](#)

A Rust library for trait method dispatch based on proc-macro.

- Inspired by remote-trait-object in the next section.
- Provides a proc-macro which generates a dispatcher and stub implementation from a trait definition.
- Provides a simple implementation of remote method invocation based on HTTP.
- Supports asynchronous methods.

2020-2021 **remote-trait-object** Main developer · [Link](#)

A Rust library for remote method invocation based on trait objects. You can find [an article](#) about this project in the postings section.

- Abstracts services and proxy objects over traits.
- Provides a proc-macro which generates a dispatcher and stub implementation from a trait definition.
- Designed to easily export and import services.

- Based on Well abstracted and independent transport model.

2019-2021

CodeChain FoundryCore developer · [Link](#)

A blockchain engine based on Tendermint and Rust, inspired by Cosmos SDK. You can find [an article](#) about this project in the postings section.

- Provides all the essential blockchain functionalities such as consensus, transaction, state DB, mempool, p2p-networking, and more.
- Based on a composable module system which provides sandboxing and principled inter-module communication.
- Supports IBC and light client.
- Supports GraphQL.

2019-2020

junhaslMain developer · [Link](#)

A C++ library for serialization and deserialization which highly exploits template meta programming.

- Supports various primitive and composite types.
- Supports custom classes.

POSTINGS & TALKS

2022

PDAO Seminar: An Introduction to Blockchains - 1[Link](#)*PDAO Seminar: An Introduction to Blockchains - 2*[Link](#)

2020

CodeChain Foundry[Link](#)*remote-trait-object: One of CodeChain Foundry's core inter-module communication systems*[Link](#)*CodeChain Foundry ICS Implementation*[Link](#)*Blockchain Light Client*[Link](#)*IBC and ICS*[Link](#)**OTHER INFORMATION***Experiences*

2020 · Contributor to the specification of the Cosmos IBC protocol
Pull requests [#392](#), [#386](#), [#384](#), [#360](#)

2017 · President of Hanulim, an orchestra club in POSTECH

2015 · National team for the International Science and Engineering Fair (ISEF)

Awards

2014 · Korean Olympiad in Informatics (KOI), Gold Award (2nd)

Languages

KOREAN · Native

ENGLISH · Fluent

Personal Interests

Classical Music · Jazz · Rock · Pop · Movie

April 19, 2022