HYUNGJIN KIM

+821044348519 | hyungjin.kim.prof@gmail.com | linkedin.com/in/hyungjin-kim-prof | github.com/plast7

SUMMARY

Modern C++-oriented engineer with a world-class algorithmic track record (Codeforces International Grandmaster, max 2707; ICPC Asia Pacific Championship 23rd/36th). I build reliable software under tight constraints: authored 500+ algorithm problems, and led contest infrastructure deployed across 20+ universities. Interested in high-performance C++, concurrency, and systems on Linux.

HONORS AND AWARDS

International Grandmaster (Max Rating 2707, Top 0.06%), Codeforces	Present
3rd place, UCPC (Korea Collegiate Programming Contest)	2025
23rd Place, ICPC Asia Pacific Championship	2023
36th Place, ICPC Asia Pacific Championship	2024
3 Dan (Max Rating 2471, Top 0.25%), Atcoder	Present

EXPERIENCE

Branch and Bound (Codetree) | Algorithmic Education Startup

Seoul, Korea

Contents Researcher (Software/Research Engineer)

Mar. 2022 – *Jun.* 2025(FT; PT during AY 2023–2024)

- Engineered and productionized an LLM-based multi-agent pipeline for algorithm problem creation
 - Automated end-to-end problem generation (descriptions, test cases, validation) using LLM agents
 - Blind QA FPR 1.5% (3/200; 95% CI=0.5-4.3%), competitive with a 3% human-curated benchmark
 - Optimized task latency from "8h to "3h, boosting team throughput by 120%
- Developed and shipped 500+ university-level algorithm problems end-to-end
 - Specialized in brainteaser-style challenges integrating creative reasoning
 - Designed rigorous test cases and validation workflows for correctness and edge coverage
- Led full-stack development of training camp admin platform
 - Implemented enrollment, curriculum management, and real-time observability features
 - Deployed across 20+ university training camps, reducing operational overhead and improving reliability

EDUCATION

Yonsei University Seoul, Korea

B.S. in Computer Science Mar. 2020 – Feb. 2026 (Expected; with full-time startup role)

• President, Molgorithm (Algorithm Club), Yonsei University (2024)

Kangwon Science High School

Kangwon, Korea

High School Diploma Mar. 2017 – Feb. 2020

PROJECTS

Blobnom | Software Engineer & Product Manager

2022 - Present

- Built a gamified algorithm-learning platform with leaderboards, real-time challenges
- Implemented core services with reliability and scale in mind; grew to 700+ users

Yonsei University Programming Contest | Algorithm Contest Director & Problem Setter

2023 - 2025

- Operated 4 BOJ contests (2023/2024 YPC Open & Main; 2 personal events), attracting 800+ participants; led a 10+ member operations team
- Authored 15+ problems (game theory, state modeling) and contributed to 30+ in total (Links: 2023 [Open] [Main], 2024 [Open] [Main], Personal [1] [2])

Interpreting Diffusion Model Outputs Using PMI | Capstone Project, Yonsei University

2024

- Computed step-wise PMI on CIFAR-10 with Classifier-Free Guidance to separate inherent randomness from training defects
- Around step 40, samples appear visually uniform while PMI still captures structure

TECHNICAL SKILLS

Languages: C++, Python (Proficient) — Java, JavaScript (Familiar)

Core Strengths: Algorithms & Data Structures, Problem Solving, Competitive Programming

Developer Tools: Git, Linux

Interests: High-performance C++, Concurrency, Systems Programming