

AI researcher who aims to build RL agents that can make reliable decisions based on grounded factual information, bridging advanced decision-making algorithms with trustworthy information infrastructure.

## Skills

- Deep Reinforcement Learning, Generative Models, Security for AI & AI for Security.
- Programming languages: Python, C, C#, Bash | Libraries & Tools: PyTorch, JAX, huggingface, Docker, Git, uv.

## Current Main Project

### Signing Right Away (SRA) [\[Whitepaper\]](#)

- Hardware-rooted trust architecture for verifiable digital provenance to combat AI-generated fake content.

## Publications

**Yejun Jang**, Hong Chul Nam, Jeong Min Park, Gimin Bae, and Hyun Kwon. Q-guided flow q-learning. In *CoRL 2025 Workshop RememberRL*, Sep 2025. [\[Link\]](#) [\[PDF\]](#)

- A computational efficient RL training framework mathematically equivalent to the recently popularized Flow Q-Learning.

**Yejun Jang**, Jihun Shin, and Janghyong Lee. Exploring the structure and hyperparameters of a dqn model for penetration testing on large-scale networks. In *Proceedings of Symposium of the Korean Institute of communications and Information Sciences*, Feb 2025. [\[Link\]](#)

- Investigation of Deep Q-Network architectures and hyperparameter configurations for automated penetration testing.

**Yejun Jang**, Rocky Kim, and Yeongwha Lee. Preventing model and data poisoning attacks on military ai systems via supply chain verification techniques. In *Conference on Information Security and Cryptography Winter 2024*, Nov 2024. [\[Link\]](#)

- Research on securing military AI systems against adversarial attacks through supply chain verification.

Institute for Future Strategy of Seoul National University. *Living Ideas from Future Observers (미래 관찰자의 살아있는 아이디어)*. Porche Books, Nov 2023. **Editor and contributor**. [\[Purchase Link\]](#)

- Coined the phrase 'attention ownership' – the right to control, manage, and determine how one's attention is directed.

**Yejun Jang** and Sunjin Kim. A study on real-time feedback system for forward head posture using markerless skeletal tracking. In *International Science and Engineering Fair (ISEF)*, May 2020. [\[Link\]](#)

- Developed a contactless feedback system using computer vision to detect and correct Forward Head Posture.

## Experience

### Republic of Korea Army, Innovation Institute for Future Army (IIFA)

Apr 2024 – Oct 2025

#### Military Science & Technology Researcher

Daejeon, South Korea

- Goal: Apply deep reinforcement learning and technical knowledge to enhance cybersecurity in military systems.
- Conducted research on AI security, focusing on model and data poisoning attacks on military AI systems.
- Investigated deep reinforcement learning applications for penetration testing on large-scale networks.
- Presented research findings at national conferences (KICS 2025, CISC-W 2024).

### KAIST Autonomous Control of Stochastic Systems Lab (ACSS Lab)

Dec 2023 – Mar 2024

#### Research Intern, Advisor: Prof. Soojeon Han

Daejeon, South Korea

- Goal: Explore applications of group equivariant neural networks for multi-agent traffic optimization.
- Investigated traffic light control systems using multi-agent reinforcement learning.
- Gained experience in symmetry-aware neural network architectures and their applications to real-world problems.

### Korea Foundation for Advanced Studies (KFAS)

Feb 2023 – Feb 2024

#### Project Head, SOUL - A Modern Reinterpretation of Keynes' Bancor [\[GitHub\]](#)

Seoul, South Korea

- Goal: Model international trade using multi-agent reinforcement learning to simulate Keynes' Bancor.
- Modeled central banks of each country as an RL agent aiming to maximize annual GDP in a simulated global economy.
- Explored economic policy and international relations through game-theoretic and multi-agent simulations.
- Secured funding of 10 million KRW (~\$10,000 CAD) and managed allocation for computing, mentoring, and resources.

**KFAS & Institute for Future Strategy, Seoul National University**

Aug 2022 – Nov 2023

**Editor, Questions for Future** [\[Website\]](#) [\[Purchase Link\]](#)

Seoul, South Korea

- Goal: Create 10 impactful keyphrases that capture the essence of the digital society.
- Coined the phrase “attention ownership” – the right to control, manage, and determine how one’s attention is directed.
- Book published with title “Living Ideas from Future Observers (미래 관찰자의 살아있는 아이디어)”, available for purchase.

**Sejong Academy of Science and Arts (SASA)**

Feb 2019 – Feb 2020

**Software Lead, FHP-RTFS** [\[Link\]](#) [\[Poster\]](#) [\[GitHub\]](#)

Sejong, South Korea

- Goal: Build a contactless feedback system for correcting posture when using digital devices.
- Developed a measurement criterion for Forward Head Posture (FHP) using computer vision techniques.
- Processing 3D webcam data and providing audio feedback led to 81% improvement in participants’ FHP.
- Became the [2020 Regeneron ISEF finalist](#).

## Past Projects

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**QuPid - VR Quantum Computing Education** [\[GitHub\]](#)

- Create a VR laboratory to explain the basic but hard-to-grasp concepts in quantum computing – the qubit.
- Deepened experience in VR development as well as quantum mechanics, including photon qubits.

**Car-The-Garden - Autonomous Navigation** [\[GitHub\]](#)

- Applied left-first search and right-first search to navigate a miniature version of the standard Korean driving test.

## Scholarship

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**Korea Foundation for Advanced Studies (KFAS)**

Feb 2022 – Jan 2024

- Injaerim Scholarship Program – Attended critical thinking, communication and negotiation strategy programs.
- \$5,000/year × 2 years + \$10,000 maximum project fund per team

**Korea Advanced Institute of Science and Technology (KAIST)**

Jan 2020 – Dec 2020

- Science Talent Scholar – Full Scholarship

**National Research Foundation of Korea**

Jan 2019 – Dec 2019

- Science Talent Scholar – Full Scholarship

## Education

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**Seoul National University**

Major, Electrical and Computer Engineering

Expected Dec 2026

CGPA: 3.56/4.3

**Sejong Academy of Science and Arts**

Computer Science and Physics major

Graduated Jan 2021

GPA: 4.10/4.3

## Other

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<b>Values</b>	Ethical use of technology, communication, inclusion and equity
<b>Languages</b>	English (fluent), Korean (native)
<b>References</b>	Available upon request