YEJUN JANG

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codingJang.github.io

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 RemembeRL*, 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. Soojean 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

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

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

Seoul National University Expected Dec 2026
Major, Electrical and Computer Engineering CGPA: 3.56/4.3

Sejong Academy of Science and Arts Graduated Jan 2021
Computer Science and Physics major GPA: 4.10/4.3

Other

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