YEJUN JANG

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[LinkedIn]

Skills

- Deep learning, multi-agent reinforcement learning, generative AI (VAE, GAN), sequential models (LSTM)
- Programming: Python, C, C# | Libraries: PyTorch, NumPy, Pandas, PettingZoo, PyGame, Matplotlib

Experience

Korea Foundation for Advanced Studies (KFAS) Feb 2022 – Present
Project Head, SOUL [GitHub] Seoul, South Korea

- Goal: Simulate a currency war using reinforcement learning to derive new economical & political strategies.
- Trained game playing AI agents that learn to cooperate via communication using Deep Q-Learning on Google Cloud.
- Communicated hard-to-grasp concepts in AI including LSTM to teammates with non-technical backgrounds.
- Obtained funding of 10 million KRW (~$10,000 CAD) and allocated it to computing, mentoring, accommodation and educational resources.

Sejong Academy of Science and Arts (SASA) Feb 2019 – Feb 2020
Software Lead, FHP-RTFS [Poster] [GitHub] Seoul, South Korea

- Goal: Build a contactless feedback system for alerting incorrect body posture when using digital devices.
- Utilized computer vision techniques to develop a measurement criterion for the Forward Head Posture (FHP) without requiring the physical attachments of a medical device.
- Processing 3D webcam data and providing audio feedback led to an 81% improvement in the FHP of participants.
- Became the 2020 Regeneron ISEF finalist.

Projects

Independent Developer, QuPid [GitHub]

- Create a VR laboratory to explain the basic but hard-to-grasp concepts in quantum computing – the qubit.

Project Head, Car-The-Garden [GitHub]

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

Project Head, Rev-Missiles! [GitHub]

- Reversed engineered the mobile game “MISSILES!” to add more missiles.

Scholarship

Korea Foundation for Advanced Studies (KFAS) Recurring since Jan 2022

- 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

Awards

2020 Regeneron International Science and Engineering Fair (ISEF)	Finalist
2019 Korea Science and Engineering Fair (KSEF)	Gold Award (1st). Became ISEF finalist
2019 Korea Biz-school Youth Startup Competition	Grand Award (1st), awarded by the Korean Minister of SMEs and Startups
2020 SASA Campus Awards (Research)	Gold Award (1st)
2019 SASA Science Creativity Competition	Gold Award (1st)
2019 SASA Physics Cinematography Contest	Gold Award (1st)
2019 SASA English Creative Writing Contest	Gold Award (1st)
2018 SASA Creative Research Conference	Gold Award (1st)
2018 SASA STEAM Artwork Conference	Gold Award (1st)
Academic achievement awards (AP Physics I & II + 3 other subjects)	Given to top 4% of each class

Volunteering

Raspberry Pi Foundation Mar 2020 – Sep 2020

Translated multiple educational articles in the Raspberry Pi Foundation's Project page to Korean.

South Vancouver Neighborhood House (SVNH) Sep 2023 – Present

Assist community engagement programs and teach math & science to community members.

Education

Seoul National University Expected Dec 2026

Major, Electrical and Computer Engineering CGPA: 3.51/4.3

Student Designed Major, AI-based molecular simulation CGPA: 3.85/4.3

Sejong Academy of Science and Arts Graduated Jan 2021

Computer Science and Physics major GPA: 4.10/4.3