

# Seungwoo (Simon) Kim

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## EDUCATION

### Stanford University

*M.S. in Computer Science, AI Track (GPA: 3.95/4.3)*

*B.S. in Computer Science, Systems Track (GPA: 3.98/4.3)*

Stanford, CA

*Expected Jun. 2026*

*Jun. 2025*

## EXPERIENCE

### Stanford Neuro AI Lab

*Student Researcher (Advised by Prof. Dan Yamins)*

Sep. 2023 – Present

*Stanford, CA*

- Developed unsupervised optical flow model reducing TAP-Vid EPE by 38.5% v.s. baselines (arXiv 2503.19953)
- Built SOTA point tracker via zero-shot extraction from generative world models; under review at ML venue
- Co-developed a zero-shot object segmentation pipeline using large vision models; under review at same venue

### Stanford Cybench

*Student Researcher (Advised by Prof. Percy Liang)*

Jan. 2025 – Present

*Stanford, CA*

- Authored CWE-20 InvokeAI task for BountyBench to test LLM cyber-agent capabilities (bountybench.github.io)
- Implemented persistent memory for LLM agents in long-horizon, multi-agent benchmark (arXiv 2505.15216)
- Developed unit tests and CI/CD pipelines using Python and Docker to ensure benchmark and eval robustness

### Moloco

*ML Engineer Intern*

Jun. 2023 – Sep. 2023 / Jun. 2024 – Sep. 2024

*Redwood City, CA*

- Productionized Mamba architecture in Tensorflow, doubling event sequence length for online recommendation
- Reduced recommendation model serving-time latency by 30% via item embedding caching in two-tower model
- Performed systematic ablations & error analysis to improve CTR/CVR accuracy on high-traffic ad campaigns

### Stanford CS Department

*Teaching Assistant*

Jan. 2023 – Jun. 2023

*Stanford, CA*

- Selected as an undergraduate through competitive process of two technical/behavioral interviews
- Led weekly classes, office hours, and debugging sessions in Python/C++ for largest Stanford CS course sequence

### Haechi Labs

*Software Engineer Intern*

Apr. 2022 – Aug. 2022

*Seoul, South Korea*

- Built an inter-blockchain testing environment that simulated cross-chain transfers for the company's mainnet
- Improved deployed wallet app test coverage to 80% and halved CI time using TypeScript and Spring
- Shipped mainnet inter-chain stablecoin transaction feature in Go/TypeScript using IBC protocol stack

### 27th Infantry Division, ROK Army

*Sergeant & Squad Leader*

Sep. 2020 – Mar. 2022

*Hwacheon, South Korea*

- Built HR tools managing over a 100 personnel, and spearheaded division training over company of 50 soldiers

### Hanwha Group

*Software Engineer Intern*

Jun. 2020 – Aug. 2020

*Seoul, South Korea*

- Developed Node.js backend for HR platform that cut time-tracking errors by 20%.
- Built a KakaoTalk chatbot that increased market research survey response rates by 15%

## PROJECTS & OPEN SOURCE

**Keras** — Open-Source Contributor | Python • TensorFlow • JAX • PyTorch

Jun. 2024 – Sep. 2024

- Implemented parallel associative scan ops supporting all backends; bug patches in data & image processing utility

**Stanford ASES Entrepreneurship Society** — Abroad Team Director

Jun. 2020 – Sep. 2020

- Directed a global internship program with Altos Ventures, matching 10 Stanford students with Asian tech startups

**2021 National K-Startup Challenge**

Dec. 2021

- Represented the Korean Ministry of National Defense. Won top-prize for cross-category recommendation app

## TECHNICAL SKILLS

**Languages:** Python, CUDA, C/C++, Java, JavaScript, TypeScript, HTML/CSS

**Frameworks & Libraries:** PyTorch, Tensorflow, Jax, Numpy, React, Node.js, Flask

**Developer Tools:** Git, Docker, Airflow, Beam, GCP, AWS, Azure