

Curriculum Vitae

Ph.D. Student in Artificial Intelligence · Korea University

 Email

 Google Scholar

 ORCID

 ResearchGate

 GitHub

Research interests

Human & AI Visual Perception · Explainable AI · Vision-Language Models · AI in Finance

Education

- **Ph.D. student in Artificial Intelligence, Korea University** — Mar. 2020–Present
- **B.S. in Computer Engineering, Hongik University** — Mar. 2014–Feb. 2020
- **SOAS, University of London** — Sept.–Dec. 2016: Exchange student

Research experience

- **Multi-Agent Quant Lab (MAQ Lab)** — Founder & lab leader, Nov. 2025–Present
Started at Modulabs as the Multi-Agent LLM Trading Lab; an open study building live-ready algorithmic trading systems with AI coding agents, two cohorts completed. Papers at ICAIF 2026 and MARBLE 2026. [Website](#)
- **Cognitive Systems Lab** — Nov. 2020–Present
Human-like object detection. Advisor: [Christian Wallraven](#).
- **PRML Lab** — Jan. 2020–Oct. 2020
Reinforcement learning for optimal trade execution and slippage minimization.
- **PEM Lab, Hongik University** — Mar. 2018–Feb. 2020: Undergraduate researcher
Human mobility data with machine learning and deep learning; led to the FedCSIS 2019 paper and two patent applications.

Work experience

- **Eugene Investment & Securities** — Intern, CM Team, Bond Solutions Office, Fixed Income Division — May 2026–Present
LLM-based collection and analysis of large, diverse domestic and overseas bond-market data; generating pre-market commentary on Korea Treasury Bonds, building supply–demand analysis dashboards, and developing AI-driven trading strategies.
- **Mirae Asset Daewoo** — Intern — Jan.–Feb. 2021
Financial app reputation analysis and comparative NLP research.

Publications

2026

- **Minsuk Sung**, Doohwi Cha, Juyeong Lee, Minjae Lee, Donghwa Seo, Seunghan Son, Yoontae Hwang. "AlphaLeak: What 'Blind' LLM Trading Benchmarks Still See." **ICAIF 2026** (ACM International Conference on AI in Finance), accepted (oral).
- Doohwi Cha, **Minsuk Sung**, Seunghan Son, Juyeong Lee, Donghwa Seo, Minjae Lee, Hyeonjun Yeo, Yoontae Hwang. "CallRank: Isolating What Changed in Earnings-Call Q&A for Sector Ranking and Cost-Adjusted Alpha." **ICAIF 2026**, accepted (oral).
- Juyeong Lee, Donghwa Seo, Minjae Lee, Seunghan Son, **Minsuk Sung**, Doohwi Cha, Yoontae Hwang. "Decision-Focused Learning of the Gerber Threshold." **ICAIF 2026**, accepted (oral).
- Seunghan Son, Doohwi Cha, Minjae Lee, Juyeong Lee, **Minsuk Sung**, Donghwa Seo, Yoontae Hwang. "SlipClock: A Conditional Displayed-Depth Cost Benchmark for Evaluating Financial AI Strategies in Crypto Futures." **ICAIF 2026**, accepted.
- Doohwi Cha, Hyeonjun Yeo, Gyuil Jung, Jeongkyoo You, **Minsuk Sung**, Donghwa Seo, Minjae Lee, Seunghan Son, Juyeong Lee, Yoontae Hwang. "Metropolitan Housing Signals for Treasury Duration Risk Management." **ICAIF 2026**, accepted (poster).
- Doohwi Cha, Minjae Lee, **Minsuk Sung**, Juyeong Lee, Donghwa Seo, Seunghan Son, Yoontae Hwang. "The Division of Research: Information Access and Independent-Book Capacity in LLM Investment Teams." **ICAIF 2026**, accepted.
- Doohwi Cha, **Minsuk Sung**, Minjae Lee, Hyeonjun Yeo, Hanhee Kim, Seunghan Son, Donghwa Seo, Juyeong Lee. "NEST: BTC-Unit Wipeout Thresholds for Crypto-Treasury Leveraged ETFs." **MARBLE 2026** (International Conference on Mathematical Research for Blockchain Economy), Springer Lecture Notes in Operations Research.
- Doohwi Cha, Hanhee Kim, Hyeonjun Yeo, **Minsuk Sung**, Minjae Lee, Seunghan Son, Donghwa Seo, Juyeong Lee. "Pricing the Unprovable: Ambiguity, Turnstile Runs, and the Verifiability Discount in Crypto Protocols." **MARBLE 2026**.
- Donghwa Seo, Doohwi Cha, Seunghan Son, Juyeong Lee, **Minsuk Sung**, Minjae Lee. "Basis-Only Funding Is Not Dividend Fair: Settlement Design in Crypto Equity Perpetuals." **MARBLE 2026**.
- Donghwa Seo, Doohwi Cha, Seunghan Son, Juyeong Lee, Minjae Lee, **Minsuk Sung**. "When Cross-Venue Agreement Is Not Price Discovery: Disclosure Frontiers for 24/7 Equity-Perpetual Oracles." **MARBLE 2026**.
- Youhyun Sung, **Minsuk Sung**, Claus-Christian Carbon, Christian Wallraven. "Art Wins: Higher Valuation Responses to Op Art Compared to Matched Optical Illusions." **ECVP 2026** (48th European Conference on Visual Perception), poster.
- Youhyun Sung, **Minsuk Sung**, Claus-Christian Carbon, Christian Wallraven. "Does Spatial Ambiguity Contribute to Aesthetic Preference? Evidence from Op Art and Matched Control Stimuli." **VSAC 2026** (Visual Science of Art Conference), oral presentation; abstract to appear in *Art & Perception*.

2019

- Ha Yoon Song, Moo Sang Baek, **Minsuk Sung**. "Generating Human Mobility Route Based on Generative Adversarial Network." **FedCSIS 2019**, Annals of Computer Science and Information Systems, vol. 18, pp. 91–99. DOI

- **Minsuk Sung**, Ha Yoon Song. "Prediction on Visited Stations through the Analysis of Individual Movements Data." **Korean Institute of Information Scientists and Engineers (KIISE), 2019.**

Teaching & service

- **NAVER Boostcamp AI Tech (Upstage), cohorts 1-8** — Jan. 2021–Present: AI mentor and teaching assistant; competition development (math-equation recognition, object detection) and lecture content review
- **AIFFEL, Modulabs** — May–June 2022: AI mentor for a machine-learning-based Ethereum trading project
- **Intel Korea** — 2019–2023: Object detection, image classification, and OpenVINO conversion workshops
- **National Information Society Agency (NIA), K-ICT Big Data Center** — Aug. 2022: Instructor, deep learning course for public officials (3 days, 21 hours), from Python basics to introductory deep learning
- **National Information Society Agency (NIA), K-ICT Big Data Center** — Aug. 2021: Instructor, AI training on analytics infrastructure for working professionals (3 days, 21 hours), from Python basics to introductory machine learning
- **FAST CAMPUS** — Jan. 2021: Teaching assistant for SK's company-wide machine learning training for new employees
- **Samsung Electronics DS** — Deep learning leadership training

Activities

- **BOAZ student data science community, organizing team** — Jan. 2019–Jan. 2020: Introductory crawling and deep learning lectures, and Kaggle workshops
- **HIARC, Hongik University algorithm club** — Mar. 2018–Feb. 2019: Algorithm and *Data Science from Scratch* study groups
- **Intel Korea Drone Festival** — Aug. 2019: Tello drone control and object recognition with OpenVINO and Caffe
- **Python-based Big Data Analysis, Korea Data Agency (Yonsei Data Campus)** — July–Aug. 2019: NumPy, pandas, scikit-learn, TensorFlow and Keras
- **Python Programming Using Big Data, Samsung Multicampus** — Jan.–Feb. 2019: Python, Flask and MySQL
- Study groups on *Hands-On Machine Learning* and *Deep Learning from Scratch*; BOAZ graduation project on real-time violence detection

Awards

- Feb. 2021 — Oral disease medical imaging AI competition (Samsung Medical Center, Ajou University Hospital, NIA): **3rd place**, team A [해보세요](#) · [article](#)
- Dec. 2020 — 4th Big Data Festival (Mirae Asset Daewoo): **Excellence Award**, team [상타나HOXY](#) · [article](#)
- June 2020 — Biological optical data AI competition (DACON): **7th of 696**
- Apr. 2020 — Public data temperature estimation AI competition (DACON): **2nd of 1,081**

- Nov. 2019 — 3rd Big Data Festival (Mirae Asset Daewoo): **Gold Award**, team 이등 · [article](#)
- Nov. 2019 — 7th Big Contest (Ministry of Science and ICT, NIA): **Top Excellence Award**, team 메로나
- Sept. 2019 — Space weather disaster prediction AI competition (National Radio Research Agency): **7th in the finals**
- Mar. 2019 — Seoul Hardware Hackathon (Seoul Business Agency): **3rd place**

Patents

- 2019 — Method for selecting candidate sites for hub terminals (KR application 10-2019-0013100)
- 2019 — Human mobility route prediction using GANs

Contact

minsungsung@korea.ac.kr · Seoul, South Korea