Han Sung Park

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EDUCATION

Georgia Institute of Technology — Atlanta, USA
M.S. in Computer Science (Machine Learning); GPA: 4.0/4.0 — *Aug 2024 – Dec 2025*

Korean National Open University — Seoul, South Korea
B.S. in Computer Science/Engineering; GPA: 4.2/4.5 — *Sep 2022 – Jun 2024*

Georgia Institute of Technology — Atlanta, USA
Industrial and Systems Engineering; — *Aug 2012 – May 2014*

EXPERIENCE

Georgia Institute of Technology — Atlanta, USA
Graduate Teaching Assistant — *Aug 2025 - Present*

- **ML Curriculum Support (CS 7641 Machine Learning)**: Facilitated learning for student cohort on core ML concepts (Supervised/Unsupervised Learning, Optimization, and Reinforcement Learning) by leading technical discussions and debugging sessions.
- **Project Evaluation**: Assessed complex ML implementations, providing code-level feedback on scalability and algorithmic efficiency under the guidance of Dr. Theodore J. LaGrow.

Freelancer — Seoul, South Korea
Software Engineer — *Mar 2024 - Aug 2024*

- **TP-Link**: Engineered automated data ingestion pipelines using Python and MongoDB. Architected numerous crawlers to handle high-concurrency data streams from diverse e-commerce platforms, optimizing for low-latency data availability.
- **Ritsumeikan University Startup Lab**: Launched a full-stack social networking application, handling authentication and database schema design to support concurrent user scheduling.

TP-Link — Seoul, South Korea
Technical Translator — *Jan 2023 - Mar 2024*

Egarda Pty Ltd (ThreatDefence) — Sydney, Australia
Cloud Engineer — *Jul 2017 - Mar 2021*

- **Cloud Engineering**: Led migration and deployment of high-availability cloud infrastructure on AWS, GCP and Azure. Designed scalable backend architectures that supported data-intensive applications, ensuring 99.9% uptime and reducing system latency.
- **ServiceDesk Manager**: Served as the primary point of contact for 150+ clients. Delivered tailored consulting on AWS, Azure, and GCP, hands-on support, and training that boosted customer satisfaction

PROJECTS

- **HuggingFace KG Retriever**: Constructed a heterogeneous Knowledge Graph pipeline. implemented ranking logic integrating BGE and BM25 embeddings. Trained GNNs using Focal Loss, improving retrieval precision by 30%. Optimized inference pipelines for scalable deployment.
- **Graph RAG Legal Chatbot**: Designed a citation-aware RAG pipeline using Neo4j, LangChain, and LegalBERT. Combined semantic search with graph traversal to boost retrieval recall by 20%. Deployed Gemini-powered generation to provide verifiable immigration advice grounded in US Code.
- **Deep Learning based NIDS**: Benchmarked FCNN, CNN, and RNN models for intrusion detection. Solved extreme class imbalance using Focal Loss and Adam optimization, achieving 87% balanced accuracy

SKILLS AND ACHIEVEMENTS

- **Tools and Technologies**: PyTorch, Keras, Tensorflow, Sklearn, Neo4j, LangChain, Python, C++, Javascript, HTML/CSS, Git, AWS, Azure, GCP, Docker, MongoDB, Postgres, CI/CD
- **Chief of Staff, Army award**: Won at the Depart of Defense's Annual Hackathon by a building blockchain-based ledger system for army supplies (Hyperledger Fabric + Django)
- **Languages**: Bilingual in Korean & English (TOEFL iBT: 117/120)