

# Han Sung Park

<https://www.linkedin.com/in/han-sung-park-704aa7167/>  
<https://hspark15429.github.io/>

Email : [hspark15429@gmail.com](mailto:hspark15429@gmail.com)

## EXPERIENCE

- **Georgia Institute of Technology** Atlanta, USA  
*Graduate Teaching Assistant* Aug 2025 - Present
  - **CS 7641 Machine Learning:** Led office hours, student discussions and Q&A; Graded ML projects and reports under the guidance of Dr. Theodore J. LaGrow.
- **Freelancer** Seoul, South Korea  
*Software Engineer* Mar 2024 - Aug 2024
  - **TP-Link:** Onboarded numerous web crawlers (Scrapy, pyppeteer, Selenium, Playwright) to extract data from diverse shopping platforms(e.g. Naver and Coupang); Automated team workflows
  - **Ritsumeikan University Startup Lab:** Successfully launched a class scheduling & social networking app
- **TP-Link** Seoul, South Korea  
*Technical Translator* Jan 2023 - Mar 2024
- **Republic of Korea Army** Paju, South Korea  
*Weapons Specialist* Apr 2021 - Oct 2022
- **Egarda Pty Ltd (ThreatDefence)** Sydney, Australia  
*Cloud Engineer* Jul 2017 - Mar 2021
  - **Cloud Engineering:** Led and managed end-to-end cloud and on-premises infrastructure projects—including migration, and deployment—ensuring seamless integration and a reduction in downtime
  - **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

## 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

## PROJECTS

- **HuggingFace KG Retriever:** Constructed a heterogeneous Knowledge Graph pipeline integrating BGE and BM25 embeddings. Trained GNNs (GAT, Transformer) using Focal Loss for multi-label classification, improving micro-f1 by 30% over baselines. Implemented Graph-RAG via Ego-Graphs and fine-tuned Qwen and Mistral LLMs using PyTorch Geometric.
- **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, Sklearn, Neo4j, LangChain, Python, Git, AWS, GCP, Docker, MongoDB, Postgres
- **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)
- **TOEFL:** 117/120