Seokjin Han

🌐 blog.raifthenerd.com • in raifthenerd • ○ raifthenerd • ⌨ raifthenerd

Education

Seoul National University	**Seoul, Korea**
M.Sc. in Statistics	*Mar 2017 — Feb 2019*

Supervisor: Prof. Jaeyong Lee @ Bayesian Statistics Lab.
Thesis: *De Novo* Drug Design Using Deep Generative Models

Seoul National University	**Seoul, Korea**
B.Sc. in Industrial Engineering & B.Sc. in Statistics, Cum Laude	*Mar 2012 — Feb 2017*

Minor in Computer Science and Engineering.

Seoul Science High School	**Seoul, Korea**
High School Diploma	*Mar 2009 — Feb 2012*

Experience

Vocational

TwelveLabs	**Seoul, Korea**
ML Research Scientist, ML Modeling Team	*Dec 2023 — Current*

Contributed to the development of Marengo, a state-of-the-art video search model.

Standigm	**Seoul, Korea**
AI Scientist, AI-Bio Team	*Jan 2019 — Dec 2023*

Developed core models of Standigm ASK™, the in-house platform that utilizing various types of biological data (including knowledge graphs and NGS data) with neural networks.

Bayesian Statistics Lab @ Seoul National University	**Seoul, Korea**
Research Intern	*Dec 2015 — Feb 2016*

Implemented various stochastic search algorithms for variable selection in Bayesian linear models.

PRND Company	**Seoul, Korea**
Machine Learning Engineer	*Jul 2015 — Aug 2015*

Developed a market price prediction service for used cars using Bayesian methods.

Teaching

Statistical Computing and Lab. (326.212)	**Seoul National University**
Teaching Assistant	*Fall 2018*

Instructor: Prof. Joong-Ho (Johann) Won

Statistics Concept and Lab. (033.021)	**Seoul National University**
Teaching Assistant	*Spring 2018*

Instructor: Prof. Sinsub Cho

Data Mining Methods and Lab. (326.413)	**Seoul National University**
Teaching Assistant	*Fall 2017*

Instructor: Prof. Yongdai Kim

Skills

Computer

Programming Languages: Julia, Rust, Python, R   **Deep Learning Framework**: Flux.jl, PyTorch

Languages

English: Professional working proficiency.   **Korean**: Native proficiency.

Publications

†: equal contributions, *: corresponding author(s).

Papers

○ Minyoung So†*, Soo Jung Park†, Dongin Kim, **Seokjin Han**, Hee Jung Koo, Taeyong Kim, Min-Gi Shin, Eun Jeong Lee* (2026). Systematic discovery of disease-modifying targets by prediction from knowledge graph-based AI model and experimental validation: Parkinson's disease case. *Computational and Structural Biotechnology Journal.* `DOI:10.1016/j.csbj.2025.12.035`

○ **Seokjin Han**†*, Ji Eun Lee†, Seolhee Kang, Minyoung So, Jin Hee, Jang Ho Lee, Sunghyeob Baek, Hyungjin Jun, Tae Yong Kim and Yun-Sil Lee* (2024). Standigm ASK™: Knowledge Graph and Artificial Intelligence Platform Applied to Target Discovery in Idiopathic Pulmonary Fibrosis. *Briefings in Bioinformatics, 25*(2). `DOI:10.1093/bib/bbae035`

○ **Seokjin Han**, Jinhee Hong, So Jeong Yun, Hee Jung Koo* and Tae Yong Kim* (2023). PWN: enhanced random walk on a warped network for disease target prioritization. *BMC Bioinformatics, 24*(1). `DOI:10.1186/s12859-023-05227-x`

Preprint

○ Dongin Kim†*, **Seokjin Han**†, Seong-Hyeuk Nam and Tae Yong Kim (2024). Learning the Relationship Between Variants, Metabolic Fluxes and Phenotypes. *bioRxiv*. `DOI:10.1101/2024.03.04.577140`

Patents

○ **Seokjin Han**, Tae Yong Kim, Hee Jung Koo, So Jeong Yun (2024). Method and System for Searching Target Node Related to Queried Entity in Network. *U.S. Patent Application No. 18/274,416.*

○ Hee Jung Koo, **Seokjin Han**, Chiwon Son, Jang Ho Lee, Tae Yong Kim, Chanung Jeong, Jinhan Kim, Sang Ok Song, So Jeong Yun (2022). Method of predicting disease, gene or protein related to queried entity and prediction system built by using the same. *U.S. Patent Application No. 17/297,352.*

Scholarships

Merit-based Scholarship	*Fall 2018*
Merit-based Scholarship	*Spring 2018*
Brain Korea 21 Plus	*Fall 2017*
National Scholarship For Science and Engineering	*Fall 2015*
The Education and Research Foundation College of Engineering SNU Scholarship	*Spring 2015*
SNU Development Fund Scholarship	*Fall 2014*
SNU Development Fund Scholarship	*Spring 2014*
Merit-based Scholarship	*Fall 2013*
SNU Development Fund Scholarship	*Fall 2012*
Superior Academic Performance	*Spring 2012*

Awards

Honorable Mention @ IoT Innovation Challenge
Korea Electronics Association & Samsung Electronics   *Oct 28, 2016*

Second Prize @ LG CNS Hacker Camp
LG CNS   *Nov 22, 2014*

Certification

Engineer Information Processing
Human Resources Development Service of Korea   *Nov 18, 2016*