

YOUNG JIN PARK

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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

Cambridge, MA

Ph.D. Candidate at MIT LIDS. GPA: 5.0/5.0

Sept. 2022 – June 2026

- Supervisor: Navid Azizan
- Working on the *Uncertainty Quantification for Foundation Models*.

KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST)

Daejeon, Korea

M.S. in Aerospace Engineering. GPA: 4.12/4.3

Feb. 2017 – Feb. 2019

- Supervisor: Han-Lim Choi
- Thesis: *Interpretable Unsupervised Learning of Bayesian Nonparametric Dynamic State-Space Model*.

KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST)

Daejeon, Korea

B.S. in Aerospace Engineering & Mathematical Sciences (minor). GPA: 4.03/4.3

Mar. 2013 – Feb. 2017

- KAIST Presidential Fellow (awarded to top 10 students from the Class of 2017)

KOREA SCIENCE ACADEMY OF KAIST (KSA)

Busan, Korea

GPA: 4.00/4.3 (graduated with academic excellence award)

Feb. 2010 – Feb. 2013

PROFESSIONAL EXPERIENCE

NAVER CLOVA | Biz AI

Seongnam-si, Korea

Machine Learning Research Engineer

Feb. 2019 – Aug. 2022

- Developed LLM-based user behavior prediction frameworks.
- Developed 60M-scale recommender systems / 45M-scale ensemble forecasting systems.
- Developed ML pipelines – including data ingestion, processing, model training, and inference – for the aforementioned large-scale, real-world systems.

PROGRAMMING SKILLS & EXPERIENCES

- Python (Proficient) / SQL & Data Analysis (Proficient) / Deep Learning Frameworks (Proficient)
- 3+ years of professional experiences at NAVER
- 2 years of MS research experiences at KAIST

PUBLICATIONS

*Authors contributed equally; IF: Impact Factor

Peer-Reviewed Conference Proceedings

1. Quantifying Representation Reliability for Self-Supervised Learning Models

Y.J. Park, H. Wang, S. Ardeshir, N. Azizan

In *RSS 2023 Workshop @ Safe Autonomy (Spotlight)*, Under Review in UAI 2024

2. A Large-Scale Ensemble Learning Framework for Demand Forecasting

Y.J. Park, D. Kim, F. Odermatt, J. Lee, and K.M. Kim.

In *IEEE International Conference on Data Mining (ICDM)*, 2022. (*Full Paper*, Acceptance rate: 9.77%)

3. Distilling a hierarchical policy for planning and control via representation and reinforcement learning

J.S. Ha*, Y.J. Park*, H.J. Chae, S.S. Park, and H.L. Choi.

In *IEEE International Conference on Robotics and Automation (ICRA)*, 2021.

4. A Worrying Analysis of Probabilistic Time-series Models for Sales Forecasting

S. Jung*, K.M. Kim*, H. Kwak*, and Y.J. Park*.

In *Neural Information Processing Systems (NeurIPS)*, ICBINB Workshop, PMLR, 2020. (*Best Poster Awards*)

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5. **Adaptive Path-Integral Autoencoders: Representation Learning and Planning for Dynamical Systems**
J.S. Ha, Y.J. Park, H.J. Chae, S.S. Park, and H.L. Choi.
In *Neural Information Processing Systems (NeurIPS)*, 2018.

Journal Publications / Preprints

6. **Online Gaussian Process SSM: Learning and Planning for Partially Observable Dynamical Systems**
S.S. Park, Y.J. Park, Y. Min, and H.L. Choi.
International Journal of Control, Automation and Systems, 2022. [IF: 3.314]
7. **A neural process approach for probabilistic reconstruction of no-data gaps in lunar digital elevation maps**
Y.J. Park, and H.L. Choi.
Aerospace Science and Technology, 2021. [IF: 5.107]
8. **Bayesian Nonparametric SSM for System Identification with Distinguishable Multimodal Dynamics**
Y.J. Park, S.S. Park, and H.L. Choi.
Journal of Aerospace Information Systems, 2021. [IF: 1.076]
9. **Efficient Sensor Network Planning Method using Approximate Potential Game.**
S.J. Lee, Y.J. Park, and H.L. Choi.
International Journal of Distributed Sensor Networks, 2018. [IF: 1.787]
10. **Deep Matrix-variate Gaussian Process**
Y.J. Park, P.M. Tagade, and H.L. Choi.
In *UAI Workshop 2018: Uncertainty in Deep Learning & IEEE Access*, 2018. [IF: 4.098]
11. **VQ-AR: Vector Quantized Autoregressive Probabilistic Time Series Forecasting** (Preprint)
K. Rasul, Y.J. Park, M. Ramström, and K.M. Kim.
12. **One4all User Representation for Recommender Systems in E-commerce** (Preprint)
K. Shin, H. Kwak K.M. Kim, M. Kim, Y.J. Park, J. Jeong, and S. Jung

Workshops & Late-Breaking Results (Short Papers)

13. **Uncertainty-Aware Meta-Learning for Multimodal Task Distributions**
C. Almecija, A. Sharma, Y.J. Park, and N. Azizan
In *Neural Information Processing Systems (NeurIPS), Workshop on Meta-Learning*, 2022.
14. **Global-Local Item Embedding for Temporal Set Prediction**
S. Jung, Y.J. Park, J. Jeong, K.M. Kim, H. Kim, M. Kim, and H. Kwak.
In *ACM Recommender Systems (RecSys), Late-Breaking Results*, 2021.
15. **Adaptive Memory using Dynamic Graph Networks for Staleness Problem in Recommender System**
I.J. Kwon, K.M. Kim, J. Jeong, K. Shin, Y.J. Park, and B.T. Zhang.
In *Knowledge Discovery and Data mining (KDD), Workshop on OARS*, 2021. ([Spotlight](#))
16. **Hop Sampling: A Simple Regularized Graph Learning for Non-Stationary Environments**
Y.J. Park, K. Shin, and K.M. Kim.
In *Knowledge Discovery and Data mining (KDD), Workshop on MLG*, 2020.
17. **Multi-Manifold Learning for Large-scale Targeted Advertising System**
K. Shin, Y.J. Park, and K.M. Kim.
In *Knowledge Discovery and Data mining (KDD), AdKDD Workshop*, 2020.
18. **div2vec: Diversity-Emphasized Node Embedding**
J. Jeong, J.M. Yun, H. Keam, Y.J. Park, Z. Park, and J. Cho.
In *ACM Recommender Systems (RecSys), Workshop on the IRS*, 2020.
19. **Tripartite heterogeneous graph propagation for large-scale social recommendation**
K.M. Kim*, D. Kwak*, H. Kwak*, Y.J. Park*, S. Sim, J.H. Cho, M. Kim, J. Kwon, N. Sung, and J.W. Ha.
In *ACM Recommender Systems (RecSys), Late-Breaking Results*, 2019.

ACADEMIC HONORS

AWARDS

<i>Best Poster Awards</i> — ICBINB@NeuRIPS Workshop	Dec. 2020
<i>M.S. Outstanding Paper Award</i> — Dept. of Aerospace Engineering, KAIST	Oct. 2019
<i>3rd Place</i> — KSIAM-Math Works Problem Challenge	Nov. 2017
<i>Exemplary Academic Achievement Award</i> — Dept. of Aerospace Engineering, KAIST	Sept. 2017
<i>Summa Cum Laude (Graduation Honors)</i> — KAIST	Feb. 2017
<i>3rd Place</i> — KSAS Undergraduate Student Paper Competition	Apr. 2016
<i>Academic Honors Student</i> — Dept. of Aerospace Engineering, KAIST	Mar. 2015

FELLOWSHIPS / SCHOLARSHIPS

<i>Shangzhi Wu (1985) Fellowship</i>	2022 F. – 2023 S.
<i>Young-Han Kim Global Leader Scholarship</i> — Awarded to one M.S. student at KAIST	2018 S. – 2018 F.
<i>GE Foundation Scholar-Leaders Program</i> — Administered by Fulbright and IIE	2014 S. – 2016 F.
<i>Boeing Scholarship</i>	2014 S. – 2016 F.
<i>Samsung Electronics JFL Scholarship</i>	2013 S. – 2016 F.
<i>KAIST Presidential Fellowship</i> — Awarded to ten students from the Class of 2017	2013 S. – 2016 F.