

YOUNG JIN PARK

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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) <i>Ph.D. Candidate at MIT LIDS</i> . GPA: 5.0/5.0 • Supervisor: Navid Azizan • Working on the <i>Uncertainty Quantification in Foundation Models</i> .	Cambridge, MA Sept. 2022 – June 2026
KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST) <i>M.S. in Aerospace Engineering</i> . GPA: 4.12/4.3 • Supervisor: Han-Lim Choi • Thesis: <i>Interpretable Unsupervised Learning of Bayesian Nonparametric Dynamic State-Space Model</i> .	Daejeon, Korea Feb. 2017 – Feb. 2019
KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST) <i>B.S. in Aerospace Engineering & Mathematical Sciences (minor)</i> . GPA: 4.03/4.3 • KAIST Presidential Fellow (awarded to top 10 students from the Class of 2017)	Daejeon, Korea Mar. 2013 – Feb. 2017
KOREA SCIENCE ACADEMY OF KAIST (KSA) GPA: 4.00/4.3 (graduated with academic excellence award)	Busan, Korea Feb. 2010 – Feb. 2013

PROFESSIONAL EXPERIENCE

MITSUBISHI ELECTRIC RESEARCH LABORATORIES (MERL) <i>Intern</i>	Cambridge, MA May 2024 – Aug. 2024
MIT-IBM WATSON AI LAB <i>Visiting Student Researcher</i>	Cambridge, MA Mar. 2024 – May 2024
NAVER AI LAB CLOVA <i>Machine Learning Research Engineer</i>	Seongnam-si, Korea Feb. 2019 – Aug. 2022

PUBLICATIONS

*Authors contributed equally; IF: Impact Factor

Peer-Reviewed Conference Proceedings

- Understanding and Quantifying Reliability in Object Detection Transformers** (preprint)
[Y.J. Park*](#), C. Sobolewski*, A. Sharma, and N. Azizan.
- Exploring the Promise of Time-Series Foundation Models in Real-World Industrial Forecasting** (preprint)
[Y.J. Park](#), J. Liu, F. Germain, T. Koike-Akino, G. Wichern, and A. Chakrabarty.
- Quantifying Representation Reliability in Self-Supervised Learning Models**
[Y.J. Park](#), H. Wang, S. Ardeshir, and N. Azizan.
In *Conference on Uncertainty in Artificial Intelligence (UAI)*, 2024 &
In *RSS 2023 Workshop @ Safe Autonomy (Spotlight)*.
- 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%)
- 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.
- 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*)

7. **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

8. **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]
9. **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]
10. **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]
11. **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]
12. **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]
13. **VQ-AR: Vector Quantized Autoregressive Probabilistic Time Series Forecasting** (Preprint)
K. Rasul, Y.J. Park, M. Ramström, and K.M. Kim.
14. **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)

15. **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.
16. **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.
17. **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*)
18. **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.
19. **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.
20. **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.
21. **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.

ACADEMIC HONORS

AWARDS

<i>Wunsch Foundation Silent Hoist and Crane Award for excellence in a graduate student — Dept. of Mechanical Engineering, MIT</i>	Jul. 2024
<i>Best Poster Awards — ICBINB@NeuRIPS Workshop</i>	Dec. 2020
<i>M.S. Outstanding Paper Award — Dept. of Aerospace Engineering, KAIST</i>	Oct. 2019
<i>3rd Place — KSIAM-Math Works Problem Challenge</i>	Nov. 2017
<i>Exemplary Academic Achievement Award — Dept. of Aerospace Engineering, KAIST</i>	Sept. 2017
<i>Summa Cum Laude (Graduation Honors) — KAIST</i>	Feb. 2017
<i>3rd Place — KSAS Undergraduate Student Paper Competition</i>	Apr. 2016
<i>Academic Honors Student — Dept. of Aerospace Engineering, KAIST</i>	Mar. 2015

FELLOWSHIPS / SCHOLARSHIPS

<i>Shangzhi Wu (1985) Fellowship</i>	2022 F. — 2023 S.
<i>Young-Han Kim Global Leader Scholarship — Awarded to one M.S. student at KAIST</i>	2018 S. — 2018 F.
<i>GE Foundation Scholar-Leaders Program — Administered by Fulbright and IIE</i>	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 — Awarded to top 10 students from the Class of 2017</i>	2013 S. — 2016 F.