

Seoyoung Hong

PERSONAL DATA

- Birth: Jan 17th, 1998
- E-mail: seoyoung@yonsei.ac.kr
- Phone: +82-10-2474-1433
- Website: <https://seoyoung.github.io>

RESEARCH INTERESTS

- **Machine Learning / Deep Learning**
 - ✓ Recommender Systems
 - ✓ Prediction-based Optimization
 - ✓ Predictive Modeling

EDUCATION

Sep. 2021 - Aug. 2023	Yonsei University Department of Artificial Intelligence M.S. in Artificial Intelligence (Advisor: Prof. Noseong Park)	Seoul, Korea
Jan. 2023 - Jun. 2023	Georgia Institute of Technology Visiting researcher in Computational Science & Engineering (Advisor: Prof. Srijan Kumar)	Atlanta, US
Mar. 2016 - Feb. 2021	Kyunghee University Department of Business Administration B.S. in Business Administration Department of Software (Data Science Track) B.S. in Software	Seoul, Korea Yongin, Korea
Jan. 2018 - Apr. 2018	University of Leicester Exchange Student	Leicester, UK

PUBLICATIONS

- Jul. 2023 **ICML 2023**
Jeongwhan Choi, **Seoyoung Hong**, Noseong Park, and Sung-Bae Cho, “GREAD: Graph Neural Reaction-Diffusion Networks,” *International Conference on Machine Learning. PMLR*, 2023 [\[Link\]](#)
 - Keywords: Graph Neural Networks (GNNs), Classification
- Jul. 2023 **SIGIR 2023**
Jeongwhan Choi, **Seoyoung Hong**, Noseong Park, and Sung-Bae Cho, “Blurring-Sharpening Process Models for Collaborative Filtering,” *Proceedings of the 46th International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2023 [\[Link\]](#)
 - Keywords: Recommender Systems, Collaborative Filtering, Score-based Generative Models
- Dec. 2022 **IEEE BigData 2022 (Best Student Paper)**
Seoyoung Hong, Minju Jo, Seungju Kook, Jaeun Jung, Hyowon Wi, Noseong Park, and Sung-Bae Cho, “TimeKit: A Time-series Forecasting-based Upgrade Kit for Collaborative Filtering,” *2022 IEEE International Conference on Big Data (IEEE BigData)*, 2022 [\[Link\]](#)
 - Keywords: Time-series Forecasting, Recommender Systems, Collaborative Filtering
- Oct. 2022 **CIKM 2022**
Seoyoung Hong, Heejoo Shin, Jeongwhan Choi, and Noseong Park, “Prediction-based One-shot Dynamic Parking Pricing,” *Proceedings of the 31st ACM International Conference on Information & Knowledge Management*, 2022 [\[Link\]](#)
 - Keywords: Predictive Modeling, Prediction-based Optimization, Dynamic Pricing, Regression
- Dec. 2021 **ICDM 2021**
Sheoyon Jhin, Heejoo Shin, **Seoyoung Hong**, and Noseong Park, “Attentive Neural Controlled Differential Equations for Time-series Classification and Forecasting,” *2021 IEEE International Conference on Data Mining (ICDM)*, 2021 [\[Link\]](#)
 - Keywords: Time-series Forecasting, Time-series Classification
- Aug. 2021 **KDD 2021**
Duanshun Li, Jing Liu, Jinsung Jeon, **Seoyoung Hong**, Thai Le, Dongwon Lee, and Noseong Park, “Large-Scale Data-Driven Airline Market Influence Maximization,” *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery & Data Mining (KDD)*, 2021 [\[Link\]](#)
 - Keywords: Predictive Modeling, Prediction-based Optimization, Regression
- Dec. 2020 **KSC 2020**
Seoyoung Hong, Midan Shim, and Daeho Lee, “Spelling Correction System for Korean Internet Language Using Transformer Model,” *Proceedings of the Korea Software Congress (KSC)*, 2020 [\[Link\]](#)
 - Keywords: Natural Language Processing

AWARDS

Dec. 2022	IEEE Bigdata 2022 Best Student Paper Award Hosted by Institute of Electrical and Electronics Engineers (IEEE)
Feb. 2021	Korea Software Congress 2020 (KSC 2020) Junior Paper Awards , 4th Prize Hosted by the Korean Institute of Information Scientists and Engineers
Sep. 2020	Big Data Analysis Awards 2020 (Big Contest 2020) , 2nd Prize Hosted by the Korean National Information Society Agency

CERTIFICATIONS

Mar. 2023	OPIc (Advanced Mid) Test of English Speaking Proficiency
Oct. 2020	SQLD Structured Query Language Developer

SKILLS

- **Python** / C++
- **PyTorch** / Scikit-learn / Pandas / Tensorflow
- **SQL**

EXPERIENCE

Oct. 2020 - Jan. 2021	Google Machine Learning Bootcamp
--------------------------	---