

JAEMIN YOO

PhD Candidate @ Seoul National University

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EDUCATION

Seoul National University

Mar. 2016 - Present

PhD Candidate, Computer Science and Engineering

Advisor: U Kang

Seoul National University

Mar. 2012 - Feb. 2016

Bachelor of Science, Computer Science and Engineering

PUBLICATIONS

- [c10] Jaemin Yoo*, Junghun Kim*, Hoyoung Yoon*, Geonsoo Kim, Changwon Jang, and U Kang. *Accurate Graph-Based PU Learning without Class Prior*.
ICDM 2021 (regular paper; top 98/990 = 9.9%; *equal contribution)
- [c9] Jaemin Yoo, Yejun Soun, Yong-chan Park, and U Kang. *Accurate Multivariate Stock Movement Prediction via Data-Axis Transformer with Multi-Level Contexts*.
KDD 2021 (acceptance rate 238/1541 = 15.4%)
- [c8] Jaemin Yoo and Lee Sael. *Gaussian Soft Decision Trees for Interpretable Feature-Based Classification*.
PAKDD 2021 (acceptance rate 157/768 = 20.4%)
- [c7] Jaemin Yoo and U Kang. *Attention-Based Autoregression for Accurate and Efficient Multivariate Time Series Forecasting*.
SDM 2021 (acceptance rate 85/400 = 21.3%)
- [c6] Jaemin Yoo, U Kang, Mauro Scanagatta, Giorgio Corani, and Marco Zaffalon. *Sampling Subgraphs with Guaranteed Treewidth for Accurate and Efficient Graphical Inference*.
WSDM 2020 (acceptance rate 91/615 = 14.8%)
- [c5] Jaemin Yoo, Minyong Cho, Taebum Kim, and U Kang. *Knowledge Extraction with No Observable Data*.
NeurIPS 2019 (acceptance rate 1428/6743 = 21.2%)
- [c4] Jaemin Yoo and Lee Sael. *EDiT: Interpreting Ensemble Models via Compact Soft Decision Trees*.
ICDM 2019 (acceptance rate 194/1046 = 18.5%)
- [c3] Jaemin Yoo, Hyunsik Jeon, and U Kang. *Belief Propagation Network for Hard Inductive Semi-Supervised Learning*.
IJCAI 2019 (acceptance rate 850/4752 = 17.9%)
- [c2] Saehan Jo, Jaemin Yoo, and U Kang. *Fast and Scalable Distributed Loopy Belief Propagation on Real-World Graphs*.
WSDM 2018 (acceptance rate 83/514 = 16.3%)
- [j1] Mauro Scanagatta, Giorgio Corani, Marco Zaffalon, Jaemin Yoo, and U Kang. *Efficient Learning of Bounded-Treewidth Bayesian Networks from Complete and Incomplete Data Sets*.
International Journal of Approximate Reasoning, vol. 95, pp. 152–166, 2018

- [c1] Jaemin Yoo, Saehan Jo, and U Kang. *Supervised Belief Propagation: Scalable Supervised Inference on Attributed Networks*.
ICDM 2017 (regular paper; top 72/778 = 9.3%)

AWARDS & SCHOLARSHIPS

SNU BK21 Outstanding Graduate Student Award	Jul. 2021
Best Poster Award at AIIS Retreat 2021	Apr. 2021
SIAM Student Travel Awards (SDM 2021)	Apr. 2021
SNU BK21 Star Researcher Award	Feb. 2021
Qualcomm Innovation Fellowship Korea	Dec. 2020
Yulchon AI Star Award	Sep. 2020
Google PhD Fellowship Program (Machine Learning)	Sep. 2019
Samsung HumanTech Paper Award (Honorable Mention)	Feb. 2019
Google Conference Scholarships (ICDM 2017)	Nov. 2017
Paper Award in Scientific and Technical Writing by SNU	Jun. 2014
Undergraduate Student Paper Award at KSC 2014	Jun. 2014
SNU BK21 Scholarship	Mar. 2019 - Aug. 2020
Lecture & Research Scholarship by SNU	Mar. 2016 - Feb. 2019
National Scholarship For Science and Engineering by KOSAF	Mar. 2013 - Jun. 2015

DEVELOPMENT PROJECTS

Graph-Based Gold Farming Group Detection System (NCSoft)	Sep. 2020 - Feb. 2021
Deep Learning-Based Recommender System (Wemakeprice)	Feb. 2019 - Dec. 2019
Statistical Learning and Inference Method with PGMs (IDSIA)	Jan. 2016 - Dec. 2018
Feature Selection Method for RNN Recommender Systems (SK Telecom)	Mar. 2018 - Nov. 2018
Temporal Stock Price Prediction System (eMoney)	Aug. 2017 - Feb. 2018
Video Recommender System with Multimodal Data (SK Broadband)	Nov. 2016 - Jun. 2017
Distributed Machine Learning Library on Apache Spark (SK Telecom)	Mar. 2016 - Jan. 2017

INVITED TALKS

KAIST AI Student Colloquium	Oct. 2021
SNU AI Summer School 2021	Aug. 2021
SNU AI Institute (AIIS) Retreat 2021	Apr. 2021
NAVER Online Tech Talk	Dec. 2020
SNU AI Summer School 2020	Aug. 2020
SNU Hospital	Jul. 2020
SNU AI Institute (AIIS) Retreat 2020	Jun. 2020
Kakao Enterprise	Jan. 2020
Korea Software Congress 2019	Dec. 2019
SNU Center for AI Retreat 2019	Jul. 2019
Introduction to Data Mining @ SNU CSE	Jul. 2019
Samsung Electronics	Mar. 2019

Istituto Dalle Molle di Studi sull'Intelligenza Artificiale (IDSIA) *Jul. 2018*
 Korea Software Congress 2017 *Dec. 2017*

PROFESIONAL SERVICES

PC Member

- KDD (ACM SIGKDD Intl. Conf. on Knowledge Discovery and Data Mining) *2021 - 2022*
- SDM (SIAM International Conference on Data Mining) *2022*
- AAAI (AAAI Conference on Artificial Intelligence) *2021 - 2022*
- BigComp (IEEE International Conference on Big Data and Smart Computing) *2021 - 2022*

Journal Reviewer

- Pattern Recognition *2021*

TEACHING EXPERIENCE

Teaching Assistant (Seoul National University)

- Large Data Analysis (M1522.000900, 002) *Fall 2017*
- Introduction to Data Mining (M1522.001400_001) *Spring 2017*
- Data Structures (M1522.001600_002) *Fall 2016*

Teaching Assistant (Other Organizations)

- Deep Learning, Samsung Electronics *Apr. 2018 - Feb. 2019*
- Deep Learning, SNU Fourth Industrial Revolution Academy *Oct. 2017 - Dec. 2018*
- Distributed Computing, SNU Big Data Academy *Feb. 2017 - Dec. 2017*
- Distributed Computing, SNU Big Camp *Aug. 2016 - Feb. 2017*

PATENTS

1. Jaemin Yoo and U Kang, "Apparatus and Method for Classifying Nodes", KR-Registration No. 10-1924832 (2018)
2. Jaemin Yoo and U Kang, "Method for Extracting Knowledge from Artificial Neural Network and Apparatus for Performing the Same", KR-Application No. 10-2019-0174361 (2019)
3. Taebum Kim, Jaemin Yoo, and U Kang, "Method for Compressing Deep Learning Neural Networks and Apparatus for Performing the Same", KR-Registration No. 10-2199285 (2020)
4. Jaemin Yoo, Sooyeon Shim, and U Kang, "Apparatus and Method for Data Augmentation", KR-Application No. 10-2021-0169909 (2021)
5. Jaemin Yoo, Hyunsik Jeon, Jinhong Jung, and U Kang, "Apparatus and Method for Predicting Feature of Node", KR-Application No. 10-2021-0172385 (2021)