# Yeonjun In

yeonjun.in@kaist.ac.kr • Homepage • Google Scholar • Github

**RESEARCH INTEREST**

**Mitigating Data-centric Issues in AI Systems**
- Data noise [W1, S1] / Adversarial attack [C2, C5, S2] / Anomaly [C3]
- Distribution shift / Continual Learning [C6]
- Long-tailed distribution [C4, S4] / Weak supervision [C1, C7, S3]

**EDUCATION**

**KAIST (Korea Advanced Institute of Science and Technology)** Sep 2023 – Present
- Ph.D. in Industrial and Systems Engineering
  - Research Interest: Mitigating Data-centric Issues in AI Systems
  - Advisor: Prof. Chanyoung Park

**KAIST (Korea Advanced Institute of Science and Technology)** Sep 2021 – Aug 2023
- M.S. in Industrial and Systems Engineering
  - Research Interest: Robust/Reliable Graph Neural Network
  - Advisor: Prof. Chanyoung Park

**Kyunghee University** Mar 2014 – Feb 2021
- B.S. in Environmental Engineering
  - Double Major: Industrial Engineering

**WORK EXPERIENCE**

**Adobe Inc.**, San Jose, CA, USA Apr 2024 – Jun 2024
- *Research Scientist Intern*, Adobe Research
  - Mentor: Dr. Sungchul Kim

**LG CNS**, Seoul, Korea Mar 2021 – Apr 2021
- *AI Researcher*, AI Tech Lab

**Market Kurly**, Seoul, Korea Aug 2019 – Feb 2020
- *Data Analyst Intern*, Customer Initiative Team

**PUBLICATIONS**
(† : EQUAL CONT.)

**PREPRINT**

[P1] **SIMPLOT: Enhancing Chart Question Answering by Distilling Essentials**
Wonjoong Kim†, Sangwu Park†, **Yeonjun In**, Seokwon Han, Chanyoung Park

**IN SUBMISSION**

[S4] **ReTAG: Retrieval-Augmented Scene Graph Generation via Multi-Prototype Learning**
Kanghoon Yoon, Kibum Kim, Jaehyeong Jeon, **Yeonjun In**, Donghyun Kim, Chanyoung Park
The European Conference on Computer Vision (**ECCV 2024**)

[S3] **Weakly Supervised Video Scene Graph Generation with Natural Language Supervision**
Kibum Kim, Kanghoon Yoon, **Yeonjun In**, Jaehyeong Jeon, Jinyoung Moon, Donghyun Kim, Chanyoung Park
The European Conference on Computer Vision (**ECCV 2024**)

[S2] **Debiased Graph Poisoning Attack via Contrastive Surrogate Objective**
Kanghoon Yoon, **Yeonjun In**, Namkyeong Lee, Kibum Kim, Chanyoung Park
ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD 2024**)

[S1] **Noise Robust Graph Learning under Feature-Dependent Graph-Noise**
**Yeonjun In**, Kanghoon Yoon, Sukwon Yun, Kibum Kim, Sungchul Kim, Chanyoung Park
ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD 2024**)

**CONFERENCES**

[C7] **Weakly Supervised Fine-grained Scene Graph Generation via Large Language Model**
Kibum Kim, Kanghoon Yoon, Jaehyeong Jeon, **Yeonjun In**, Jinyoung Moon, Donghyun Kim, Chanyoung Park
IEEE / CVF Computer Vision and Pattern Recognition Conference **(CVPR 2024)**

[C6] **DSLR: Diversity Enhancement and Structure Learning for Rehearsal-based Graph Continual Learning**
Seungyoon Choi†, Wonjoong Kim†, Sungwon Kim, **Yeonjun In**, Sein Kim, Chanyoung Park
International World Wide Web Conference (**WWW 2024 (Oral)**)

[C5] **Self-Guided Robust Graph Structure Refinement**
**Yeonjun In**, Kanghoon Yoon, Kibum Kim, Kijung Shin, Chanyoung Park
International World Wide Web Conference (**WWW 2024 (Oral)**)

[C4] **Adaptive Self-training Framework for Fine-grained Scene Graph Generation**
Kibum Kim†, Kanghoon Yoon†, **Yeonjun In**, Jinyoung Moon, Donghyun Kim, Chanyoung Park
International Conference on Learning Representations (**ICLR 2024**)

[C3] **Class Label-aware Graph Anomaly Detection**
Junghoon Kim, **Yeonjun In**, Kanghoon Yoon, Junmo Lee, Chanyoung Park
ACM International Conference on Information and Knowledge Management (**CIKM 2023 Short Paper**)

[C2] **Similarity Preserving Adversarial Graph Contrastive Learning**
**Yeonjun In**†, Kanghoon Yoon†, Chanyoung Park
ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD 2023**)

[C1] **GraFN: Semi-Supervised Node Classification on Graph with Few Labels via Non-Parametric Distribution Assignment**
Junseok Lee, Yunhak Oh, **Yeonjun In**, Namkyeong Lee, Dongmin Hyun, Chanyoung Park
ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR 2022 Short Paper**)

**JOURNALS**

[J1] **Simple Averaging of Direct and Recursive Forecasts via Partial Pooling using Machine Learning**
**Yeonjun In**, Jae-Yoon Jung
**International Journal of Forecasting** (2022) (IF. 7.022)
**The first place** in ”M5 Forecasting - Accuracy” at Kaggle

**WORKSHOPS**

[W1] Noise Robust Graph Learning under Feature-Dependent Graph-Noise
**Yeonjun In**, Kanghoon Yoon, Sukwon Yun, Kibum Kim, Sungchul Kim, Chanyoung Park
WWW Workshop on Data-Centric AI (**DCAI 2024** (**Oral**))

## PROJECTS

**Multi-modal Mathematical Reasoning** Mar 2023 – Present
- Collaboration with Electronics and Telecommunications Research Institute (ETRI)

**Product Category Expansion and Prediction** Mar 2022 – Aug 2022
- Collaboration with Shinsegae

**Data Science for COVID-19 (DS4C)** Jan 2020 – Dec 2020
- Created the world’s 3rd most impactful COVID-19 Dataset (Ranked 3rd on Kaggle).
- Also, analyzed and visualized the data using various data mining or visualization techniques.

## AWARDS & SCHOLARSHIPS

**Poster Competition Excellence Award**, KAIST 2023
- Awarded at Industrial/Social Problem Solving Session held by Department of ISysE.

**Competition Master**, Kaggle 2020
- Highest ranked 27 out of 200k users.

**Mechanisms of Action (MoA) Prediction**, Kaggle 2020
- Ranked 33 out of 4373 teams (Top 0.7% **Silver medal**)

**M5 Forecasting - Accuracy**, Kaggle 2020
- Ranked 1 out of 5558 teams (Top 0.02% **Solo gold medal**)

**ASHRAE: Great Energy Predictor III**, Kaggle 2019
- Ranked 121 out of 3614 teams (Top 3% **Silver medal**)

**Dean's List** Spring 2019
- Kyunghee University

## TEACHING EXPERIENCE

**Teaching Assistant**
- Introduction to Deep Learning, *KAIST GSDS Micro degree* Fall 2023
- Statistical Machine Learning, *KAIST IE343* Spring 2023
- Introduction to Deep Learning, *Hankook Tire* 2022, 2023
- Machine Learning for Knowledge Service Engineering, *KAIST KSE527* Spring 2022
- Information Technology for Industrial Engineering, *KAIST IE261* Fall 2021

## PROFESSIONAL SERVICES

**Conference Reviews**
- ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2024

## TALKS AND PRESENTATIONS

**Noise Robust Graph Learning under Feature-Dependent Graph-Noise**
- WWW DCAI (Singapore, Singapore), Contributed Oral Talk, 2024.05

**Self-Guided Robust Graph Structure Refinement**
- WWW (Singapore, Singapore), Oral Presentation, 2024.05

**Similarity Preserving Adversarial Graph Contrastive Learning**
- KDD (Long Beach, USA), Oral Presentation, 2023.08

## REFERENCES

**Prof. Chanyoung Park**
Professor of Industrial and Systems Engineering
KAIST (Korea Advance Institute of Science and Technology)
cy.park@kaist.ac.kr

**Dr. Sungchul Kim**
Senior Research Scientist
Adobe Research
sukim@adobe.com

**Prof. Jae-Yoon Jung**
Professor of Industrial and Management Engineering
Kyunghee University
jyjung@khu.ac.kr

[*CV compiled on 2024-05-08*]