# YUNHUI JANG

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#### RESEARCH INTEREST

My research goal is to build generative models for structured data. Specifically, I focus on graph generative models, molecular generative models, AI4Science, etc. My previous research focused on

• AI4Science:

C1, C2, C3, C4, W1, P1

• Generative models for structural data:

C1, C2, C4, W1, P1

• Large language models for science:

W1, P1

### WORK EXPERIENCE

PuzzleData, Intern, Process mining & data analysis projects, Netmarble, Research intern, RNN-based anomaly detection, JoyCity, Intern, Data analysis on marketing KPIs, Seoul, South Korea / May 2020 - Aug 2020 Seoul, South Korea / Jul 2018 - Aug 2018 Seoul, South Korea / Jun 2017 - Aug 2017

#### **EDUCATION**

POSTECH, M.S./Ph.D. in AI Graduate School (advisor: Prof. Sungsoo Ahn) RWTH, Exchange student in Computer Science POSTECH, B.S. in Industrial & Management Engineering - cum laude

Sep 2022 - present Mar 2019 - Feb 2020 Mar 2015 - Aug 2020

### **PUBLICATIONS**

C: conference, J: journal, W: workshop, P: preprint / \* equal contribution

- [P1] Can LLMs Generate Diverse Molecules? Towards Alignment with Structural Diversity Hyosoon Jang, Yunhui Jang, Jaehyung Kim, Sungsoo Ahn
- [W1] Chain-of-thoughts for molecular understanding Yunhui Jang, Jaehyung Kim, Sungsoo Ahn NeurIPS AIDrugX Workshop, 2024
- [C4] Pessimistic Backward Policy for GFlowNets Hyosoon Jang, <u>Yunhui Jang</u>, Minsu Kim, Jinkyoo Park, Sungsoo Ahn Conference on Neural Information Processing Systems (NeurIPS), 2024
- [C3] Hybrid neural representations for spherical data Hyomin Kim, <u>Yunhui Jang</u>, Jaeho Lee, Sungsoo Ahn International Conference on Machine Learning (ICML), 2024
- [C2] A simple and scalable representation for graph generation Yunhui Jang, Seul Lee, Sungsoo Ahn International Conference on Learning Representations (ICLR), 2024 NeurIPS GLFrontiers Workshop, 2023
- [C1] Graph generation with  $K^2$ -trees

  Yunhui Jang, Dongwoo Kim, Sungsoo Ahn

  International Conference on Learning Representations (ICLR), 2024

  ICML Structured Probabilistic Inference & Generative Modeling Workshop, 2023

  Bronze Prize in 30th Samsung Humantech Paper Awards

  Winner in 2024 Qualcomm Innovation Fellowship Korea

### **TEACHING**

Teaching Assistant, POSTECH, CSED105: Introduction to AI	Sep 2023 - Dec 2023
Teaching Assistant, LAIDD, Introduction to Geometric deep learning	Oct 2023 - Nov 2023
Teaching Assistant, POSTECH, CSED490B: Introduction to machine learning	Sep $2022$ - Dec $2022$
Teaching Assistant, Hyundai Steel, AI expert course	Oct 2022 - Nov 2022

# HONORS & AWARDS

Winner in Qualcomm Innovation Fellowship Korea, Qualcomm (\$3,000)	2024
Presidential Science Scholarship, South Korea (\$70,000)	2024-present
Travel Award, ICLR (\$1,500)	2024
Bronze Prize in 30th Samsung Humantech Paper Awards, Samsung, (\$4,000)	2023
POSTECHIAN Fellowship, POSTECH, (\$3,000)	2022, 2023
RWTH Aachen University Exchange Scholarship, RWTH Aachen, (\$3,900)	2019
Realize Your Dream Scholarship, Blizzard Entertainment, (\$2,500)	2018
Presidential Science Scholarship, South Korea, (\$16,000)	2015-2020

# **SERVICES**

Conference Reviewer: NeurIPS 2023-2024, ICLR 2024-2025, ICML 2024, AAAI 2025