

# Sungyoung Lee

+1-737-320-8343 | [sylee@utexas.edu](mailto:sylee@utexas.edu) | [brianlsy98.github.io](https://github.com/brianlsy98)

 [brianlsy](#) |  [brianlsy98](#) |  [brianlsy98](#)

Austin, Texas - 78705, USA

## OBJECTIVE

I am a Ph.D. student at the Computer Science (CS) department at the University of Texas at Austin.  
I work on efficiency and scalability in Machine Learning, with current focus on deep Reinforcement Learning (RL).

## RESEARCH INTEREST

- Offline / Sparsity / Scaling RL

## EDUCATION

- **The University of Texas at Austin** Sep 2025 - Current  
*Ph.D. Student, Computer Science (CS) Department* Austin, USA
- **The University of Texas at Austin** Sep 2024 - Aug 2025  
*Ph.D. Student, Electrical and Computer Engineering (ECE) Department* Austin, USA
- **Seoul National University** Mar 2017 - Aug 2023  
*Bachelor of Science, Electrical Engineering and Computer Science (EECS) Department* Seoul, South Korea
- **Hankuk Academy of Foreign Studies** Mar 2014 - Feb 2017  
*Secondary Education* Yongin, South Korea

## PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [S.1] **Sungyoung Lee**, Ziyi Wang, Seunggeun Kim, Taekyun Lee, Yao Lai, David Z. Pan. "DICE: Device-level Integrated Circuits Encoder with Graph Contrastive Pretraining". *arXiv preprint*
- [C.1] Yao Lai, **Sungyoung Lee**, Guojin Chen, Souradip Poddar, Mengkang Hu, David Z. Pan, Ping Luo. "AnalogCoder: Analog Circuit Design via Training-Free Code Generation". In *2025 39th Association for the Advancement of Artificial Intelligence (2025 AAAI)*
- [C.2] Supriyo Maji, **Sungyoung Lee**, David Z Pan. "Analog Transistor Placement Optimization Considering Nonlinear Spatial Variations ". *2024 Design, Automation & Test in Europe Conference & Exhibition (2024 DATE)*
- [C.3] Jung-Woo Sull, **Sungyoung Lee**, Deog-Kyoon Jeong. "A 10-to-12-GHz Dual Loop Quadrature Clock Corrector in 28-nm CMOS Technology". *2022 37th International Technical Conference on Circuits/Systems, Computers and Communications (2022 ITC-CSCC)*

## MACHINE LEARNING SKILLS

- **Online/Offline Reinforcement Learning**: From scratch implementation of Proximal Policy Optimization (PPO), Soft Actor Critic (SAC), Conservative Q-Learning (CQL), Decision Transformer (DT), ...
- **Graph Neural Networks**: From scratch implementation of Graph Attention Networks (GAT), Graph Isomorphism Networks (GIN), Heterogeneous Graph Attention Networks (HAN), ...
- **Self-Supervised Pretraining**: From scratch implementation of Graph Contrastive Learning

## HONORS AND AWARDS

- **DAC Young Fellowship** Jun 2025  
*62nd Design Automation Conference*
- **UT Austin Engineering Fellowship** Sep 2024  
*ECE department at the University of Texas at Austin*
- **Golden Tiger Award** Dec 2019  
*KATUSA Training Academy (KTA), the United States Army Garrison (USAG) Humphreys*