Yijingxiu (Louise) Lu

yijingxiu-lu | solanoon

+82-10-8098-6766 | solanoon@snu.ac.kr | https://solanoon.github.io

Education

- **Seoul National University** *Sep. 2018 - Dec. 2025*
  Computer Science, Master and Ph.D. Seoul, South Korea
  ◦ GPA: 3.83/4.20
- **University of Science and Technology Beijing** *June. 2017*
  Communication Engineering, Bachelor Beijing, China
  ◦ GPA: 3.34/4.00
- **Hefei NO.6 High School** *June. 2013*
  Science, Secondary Education Hefei, China
  ◦ Grade: 1.5%

Languages

- **English:** Business and Academic Proficiency
- **Korean:** Business Proficiency
- **Chineses:** Native

Skills

- **Programming Languages:** Python, C++, MATLAB, LaTeX
- **Data Science & Machine Learning:** PyTorch, TensorFlow, HuggingFace, PyG, TorchDrug, RDKit, Matplotlib
- **Research Tools:** AutoDock Vina, ChemDraw, PyMOL, Cytoscape
- **Web Technologies:** HTML, CSS, JavaScript, Django, D3.js, 3Dmol.js, Bootstrap
- **Database Systems:** SQL
- **Research Skills:** Experimental Design, Data Analysis, Literature Review, Interdisciplinary Collaboration

Honors and Awards

- **Excellent Poster Award** *Oct. 2024*
  BIOINFO/2024 Annual Conference of Korean Society for Bioinformatics
  ◦ Presented paper: "Condition Aware Relational Learning for Chemical Reaction Yields Prediction"
- **Notable Paper Award** *May. 2024*
  Second ICLR Tiny Paper Track/ICLR
  ◦ Presented paper: "Enhancing Drug-Drug Interaction Prediction with Context-Aware Architecture"
- **Samsung HumanTech Paper Award** *Feb. 2024*
  Samsung Advanced Institute of Technology/Samsung
  ◦ Presented paper "Improving Out-of-Distribution Generalization in Graphs with Hierarchical Semantic Environments" (co-author)
- **Excellent Project Award** *Dec. 2022*
  "Chunhui Cup" Oversea Students Innovation and Entrepreneurship Competition, Ministry of Education, PRC
  ◦ Lead project: "Artificial Intelligence-Based COVID-19 Target Discovery and Drug Design"
- **Global AI & Big Data Scholarship** *Jan. 2021 - Jan. 2022*
  Daewoong Foundation
  ◦ Project focus: Improving drug-likeness of generated molecules using designed objective functions and a VAE framework
- **Global Scholarship II** *Mar. 2019 - Jun. 2021*
  Office of International Affairs/Seoul National University
- **1st Prize in Computer Games** *Aug. 2016*
  National Computer Games Tournament, China
  ◦ Awarded in categories "EinStein würfelt nicht!" and "Dots and Boxes"
- **1st Prize in Software Design and Development Competition** *Jul. 2014*
  Computer and Communication Engineering School, USTB

Leadership Experience

- **Head Teaching Assistant** *Sep. 2024 - Dec. 2024*
  Seoul National University, Department of Computer Science
  ◦ Led the 2024-2 Algorithm (001) course, coordinating teaching assistant activities and mentoring team members.
- **Head Student, Bio & Health Informatics Lab** *Aug. 2023 - Aug. 2024*
  Seoul National University [🌐]
  ◦ Managed academic and administrative affairs, organized lab meetings, and oversaw intern management.
- **Teaching Assistant, Machine Learning in Bioinformatics (001)** *Mar. 2024 - Jun. 2024*
  Seoul National University, Department of Computer Science
  ◦ Delivered lectures on deep learning methodologies and their applications on bioinformatics.
- **Teaching Assistant, AI-BIO** *Sep. 2022 - Dec. 2022*
  Seoul National University, Artificial Intelligence Institute
  ◦ Delivered lectures on AI-based drug discovery (drug-target interaction prediction models).
- **Implement Deep Learning Model on Self-Built Website** *Aug. 2022*
  Bio & Health Informatics Lab/Seoul National University [🌐]
  ◦ Implemented our proposed drug-target interaction prediction model and diffdock on our website.
- **Lab Website Maintain** *Aug. 2020 - Aug. 2023*
  Bio & Health Informatics Lab/Seoul National University [🌐]
  ◦ Maintain the homepage of BHI lab.

Patents and Publications

C=Conference, J=Journal, P=Patent, S=In Submission

[S.2] **Lu Y.**, Lee S., Kang S., & Kim S. (2025). **Mixture-of-Experts Approach for Enhanced Drug-Target Interaction Prediction and Confidence Assessment**. Accepted at BIOKDD 2024. Invited submission for publication in *IEEE ACM TCBB*.

[S.1] **Lu Y.**, Piao Y., Lee S., & Kim S. (2025). **Context-Aware Hierarchical Fusion for Drug Relational Learning**. Accepted at BIOKDD 2024. Invited submission for publication in *IEEE ACM TCBB*.

[C.3] Piao Y., Lee S., **Lu Y.**, Kim S. (2024). **Improving out-of-distribution generalization in graphs via hierarchical semantic environments**. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*.

[C.2] **Lu Y.**, Piao Y., & Kim S. (2024). **Enhancing Drug-Drug Interaction Prediction with Context-Aware Architecture**. In *The Second Tiny Papers Track at ICLR 2024*.

[C.1] Choi MG., Shin W., **Lu Y.**, & Kim S. (2023). **Triangular Contrastive Learning on Molecular Graphs**. In *Molecular Machine Learning Conference (MOML 2023)*.

[P.1] Lim S., Kim S., **Lu Y.**, et al. (2022). **Device and Method for Predicting Interactions Between Compounds and Proteins**. Assigned to Seoul National University, Patent No. 0534-20210052.

[J.1] Lim S.*, **Lu Y.***, Cho C Y., et al. (2021). **A review on compound-protein interaction prediction methods: data, format, representation and model**. *Computational and Structural Biotechnology Journal*.