Yuning You

Ph.D. Student at Texas A&M University
Email: yuning.you@tamu.edu ◇ Homepage: yyou1996.github.io

RESEARCH INTERESTS

Machine learning on non-Euclidean data (e.g. graphs) with limited labels and distribution shifts, with fundamental understanding in theory and challenging real-world applications to biomolecules.

EDUCATION

Texas A&M University, College Station — Aug 2019 - Present
Ph.D. Student in Electrical Engineering
Advisor: Prof. Yang Shen (Unofficial Co-Advisor: Prof. Zhangyang Wang)

Xi'an Jiaotong University, Xi'an — Aug 2015 - Jun 2019
Bachelor of Engineering in Information Engineering

SELECTED PUBLICATIONS

NeurIPS'20 [link]: "Graph Contrastive Learning with Augmentations", **Y. You***, T. Chen*, Y. Sui, T. Chen, Z. Wang, Y. Shen, *Conference on Neural Information Processing Systems*. (*equal contribution, 20.09% acceptance rate)

ICLR'23 [link]: "Graph Domain Adaptation via Theory-Grounded Spectral Regularization", **Y. You**, T. Chen, Z. Wang, Y. Shen, *International Conference on Learning Representations*. (31.80% acceptance rate)

Bioinformatics'22 [link]: "Cross-Modality and Self-Supervised Protein Embedding for Compound-Protein Affinity and Contact Prediction", **Y. You**, Y. Shen, *Bioinformatics*. (impact factor 6.93, MoML'22, ECCB'22 with 17.40% acceptance rate, 3DSIG COSI@ISMB/ECCB'21, MLSB@NeurIPS'20)

PROFESSIONAL EXPERIENCES

Early Clinical Development/AIML Intern — May 2023 - Present
Genentech Research and Early Development (gRED), **Genentech, Inc.**, South San Francisco
Advisor: Dr. Changlin Wan
Research Topic: TBD

ML Small Molecules Intern — May 2022 - Aug 2022
Department of Data Science and Machine Learning, **insitro, Inc.**, South San Francisco
Advisor: Dr. Bowen Liu & Ralph Ma
Research Topic: Bioactivity Signatures for Small-Molecules

Applied Scientist Intern — Jun 2021 - Aug 2021
Product Semantics Team, **Amazon.com Services, Inc.**, Remote
Advisor: Dr. Tong Zhao
Research Topic: E-Commerce Product Network Embedding

Graduate Research Assistant — Sep 2020 - Present
Department of Electrical and Computer Engineering, **Texas A&M University**, College Station
Advisor: Prof. Yang Shen & Prof. Zhangyang Wang
Research Topic: Graph Machine Learning, Computational Drug Discovery

Voluntary Research Assistant — May 2019 - Aug 2019
Intelligence SciencE and systEm Lab (iSEE), School of Data and Computer Science, **Sun Yat-Sen University**, Guangzhou
Advisor: Prof. Wei-Shi Zheng & Yuanxun Li
Research Topic: Skeleton-Based Action Recognition, Graph Convolutional Networks

Voluntary Research Assistant Sep 2018 - Apr 2019
State Key Laboratory for Strength and Vibration of Mechanical Structures, School of Aerospace Engineering, **Xi'an Jiaotong University**, Xi'an
Advisors: Dr. Gangming Lyu & Prof. Guiyan Rong
Research Topic: Symbol-Level Precoding in Wireless Transmission

Voluntary Research Assistant Jul 2018 - Aug 2018
Optical+Biomedical Engineering Laboratory (OBEL), School of Electrical, Electronic & Computer Engineering, **University of Western Australia**, Perth
Advisors: Dr. Karol Karnowski & Prof. Barry Cense
Research Topic: Optical Coherence Tomography

HONORS & AWARDS

ECEN Quality Graduate Student Award, Texas A&M University, Department of Electrical and Computer Engineering. Apr 2023

NSF Student Travel Awards, ACM International Conference on Web Search and Data Mining. Dec 2021

Chevron Scholarship, Texas A&M University, Department of Electrical and Computer Engineering. Sep 2021

Electrical and Computer Engineering PhD Merit Fellowship, Texas A&M University, Department of Electrical and Computer Engineering. Feb 2019

TALKS & SERVICES

AstraZeneca, AI&A Journal Club, online. Mar 2022

Technical University of Munich, the Learning on Graphs and Geometry Reading Group (LoGaG), online. Aug 2021

ISMB/ECCB'21, COSI: Structural Bioinformatics and Computational Biophysics (3DSIG), online. [video] Jul 2021

ICML'21, Session of Semisupervised and Unsupervised Learning, online. [video] Jul 2021

Session chair of semisupervised and unsupervised learning at ICML'21.

Reviewer in conferences of ISMB/ECCB'21,23, ACM BCB'21, ICML'21-23, NeurIPS'21-22, ICLR'22, WWW'22, LoG'22; workshops of NeurIPS'20 SSL, WWW'21 SSL, ICML'21 SSL, WWW'22 MLoG; journals of TPAMI'21,23, INS'21, TNNLS'21-22, PeerJ'21, NEPL'21, JCST'22, SIPN'22, TKDE'22, TAI'22, TMLR'23, INFFUS'23.

PUBLICATIONS [Google Scholar]

ICLR'23 [link]: "Graph Domain Adaptation via Theory-Grounded Spectral Regularization", **Y. You**, T. Chen, Z. Wang, Y. Shen, *International Conference on Learning Representations.* (31.80% acceptance rate)

MLSB@NeurIPS'22 [link]: "Does Inter-Protein Contact Prediction Benefit from Multi-Modal Data and Auxiliary Tasks?", A. Talukder, R. Yin, Y. Sun, Y. Shen, **Y. You**, *Machine Learning for Structural Biology Workshop, Conference on Neural Information Processing Systems.*

NeurIPS'22 [link]: "Augmentations in Hypergraph Contrastive Learning: Fabricated and Generative", T. Wei*, **Y. You***, T. Chen, Y. Shen, J. He, Z. Wang, *Conference on Neural Information Processing Systems.* (*equal contribution, 25.60% acceptance rate)

Bioinformatics'22 [link]: "Cross-Modality and Self-Supervised Protein Embedding for Compound-Protein Affinity and Contact Prediction", **Y. You**, Y. Shen, *Bioinformatics.* (impact factor 6.93, MoML'22, ECCB'22 with 17.40% acceptance rate, 3DSIG COSI@ISMB/ECCB'21, MLSB@NeurIPS'20)

ICLR'22 [link]: "Bayesian Modeling and Uncertainty Quantification for Learning to Optimize: What, Why, and How", **Y. You**, Y. Cao, T. Chen, Z. Wang, Y. Shen, *International Conference on Learning Representations.* (32.29% acceptance rate)

WSDM'22 [link]: "Bringing Your Own View: Graph Contrastive Learning without Prefabricated Data Augmentations", **Y. You**, T. Chen, Z. Wang, Y. Shen, *ACM International Conference on Web Search and Data Mining.* (20.22% acceptance rate)

ICML'21 Long Presentation [link]: "Graph Contrastive Learning Automated", **Y. You**, T. Chen, Y. Shen, Z. Wang, *International Conference on Machine Learning.* (3.01% acceptance rate)

TVT'21 [link]: "Probabilistic Constructive Interference Precoding for Imperfect CSIT", G. Lyu, **Y. You**, A. Li, X. Liao, C. Masouros, *IEEE Transactions on Vehicular Technology.* (impact factor 5.97)

KDF@AAAI'21 Oral [link]: "AR-Stock: Deep Augmented Relational Stock Prediction", T. Wei, **Y. You**, T. Chen, *Knowledge Discovery from Unstructured Data in Financial Services Workshop, Association for the Advancement of Artificial Intelligence Conference.*

NeurIPS'20 [link]: "Graph Contrastive Learning with Augmentations", **Y. You***, T. Chen*, Y. Sui, T. Chen, Z. Wang, Y. Shen, *Conference on Neural Information Processing Systems.* (*equal contribution, 20.09% acceptance rate)

ICML'20 [link]: "When Does Self-Supervision Helps Graph Convolutional Networks?", **Y. You***, T. Chen*, Z. Wang, Y. Shen, *International Conference on Machine Learning.* (*equal contribution, 21.80% acceptance rate)

CVPR'20 [link]: "L^2-GCN: Layer-Wise and Learned Efficient Training of Graph Convolutional Networks", **Y. You***, T. Chen*, Z. Wang, Y. Shen, *IEEE/CVF Conference on Computer Vision and Pattern Recognition.* (*equal contribution, 22.08% acceptance rate)

IPAS'18 [link]: "An Optimization Approach of Compressive Sensing Recovery Using Split Quadratic Bregman Iteration with Smoothed ℓ_0 Norm", G. Yang, **Y. You**, Z. Lu, J. Yang, Y. Wang, *IEEE International Conference on Image Processing, Applications and Systems.*