

Yingxue Zhang

Binghamton University
Computer Science Department
Engineering Building, N04
4400 Vestal Pkwy E
Binghamton, NY 13902

Address: 129 Passaic Ave, APT 301, Kearny, NJ 07032
Email: yzhang42@binghamton.edu
Homepage: <https://yingxuezhong.com>
Github: <https://github.com/yingxue-zhang>
Phone: +1 (551) 263-9462

Research Summary

Broad research interests include: (1) designing novel data mining, machine learning and AI techniques to solve spatial-temporal big data analytics problems related to smart cities, public safety, sustainability and business, and (2) human behavior analysis and decision making with meta-learning, reinforcement learning and imitation learning.

Work Experience

Binghamton University, Binghamton, NY
Assistant Professor Aug 2022-Present

Worcester Polytechnic Institute, Worcester, MA
Research Assistant Aug 2018-Aug 2020

Nuro, Mountain View, CA
Research Intern May 2021-Aug 2021

Education

Worcester Polytechnic Institute (WPI), Worcester, MA Aug 2018-May 2022
Ph.D., Data Science, Data Science Department
Thesis: Spatial-Temporal Generative Adversarial Learning.

Stevens Institute of Technology, Hoboken, NJ Aug 2016-May 2018
M.S., Financial Engineering (Data Science Track), School of Business

Shanghai Jiao Tong University, Shanghai, China Sep 2012-July 2016
B.E., Computer Science, School of Electronic, Information and Electrical Engineering

Teaching Experience

Computer Science Department, Binghamton University
Instructor Aug 2022-Present
Course: Python and Data Mining (INFO 501)

Computer Science Department, Worcester Polytechnic Institute
Teaching Assistant Jan 2020-Present
Course: Database Management Systems (CS 542)

Foiesie Business School, Worcester Polytechnic Institute
Guest Lecturer May 2021
Course: Introduction to Data Science (DS1010)

Data Science Department, Worcester Polytechnic Institute
Teaching Assistant Aug 2020-Dec 2020
Course: Reinforcement Learning (DS 595)

Conference Publications	[C1] Yingxue Zhang , Yanhua Li, Xun Zhou, Zhenming Liu and Jun Luo. C^3 -GAN: Complex-Condition-Controlled Urban Traffic Estimation through Generative Adversarial Networks. 2021 IEEE International Conference on Data Mining (ICDM).	
	[C2] Yingxue Zhang , Yanhua Li, Xun Zhou, Xiangnan Kong and Jun Luo. Curb-GAN: Conditional Urban Traffic Estimation through Spatio-Temporal Generative Adversarial Networks. In Proceedings of the 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD' 20).	
	[C3] Yingxue Zhang , Yanhua Li, Xun Zhou and Jun Luo. cST-ML: Continuous Spatial-Temporal Meta-Learning for Traffic Dynamics Prediction. 2020 IEEE International Conference on Data Mining (ICDM).	
	[C4] Han Bao, Xun Zhou, Yingxue Zhang , Yanhua Li, Yiqun Xie. COVID-GAN: Estimating Human Mobility Responses to COVID-19 Pandemic through Spatio-Temporal Conditional Generative Adversarial Networks. In Proceedings of the 28th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems.	
	[C5] Yingxue Zhang , Yanhua Li, Xun Zhou, Xiangnan Kong and Jun Luo. Traffic-GAN: Off-Deployment Traffic Estimation with Traffic Generative Adversarial Networks. 2019 IEEE International Conference on Data Mining (ICDM).	
	[C6] Yingxue Zhang , Yanhua Li, Xun Zhou and Jun Luo. STrans-GAN: Spatially-Transferable Generative Adversarial Networks for Urban Traffic Estimation. <i>Under submission</i> .	
Journal Publications	[J1] Yingxue Zhang , Yanhua Li, Xun Zhou, Jun Luo and Zhi-Li Zhang. Urban Traffic Dynamics Prediction — A Continuous Spatial-Temporal Meta-Learning Approach. In ACM Transactions on Intelligent Systems and Technology (TIST).	
	[J2] Han Bao, Xun Zhou, Yingxue Zhang , Yanhua Li, and Yiqun Xie. COVID-GAN+: Estimating Human Mobility Responses to COVID-19 through Spatio-Temporal Generative Adversarial Networks with Enhanced Features. In ACM Transactions on Intelligent Systems and Technology (TIST).	
	[J3] Yingxue Zhang , Yanhua Li, Xun Zhou, Xiangnan Kong and Jun Luo. Off-Deployment Traffic Estimation — A Traffic Generative Adversarial Networks Approach. In IEEE Transactions on Big Data (TBD).	
	[J4] Yingxue Zhang , Yanhua Li, Xun Zhou, Zhenming Liu and Jun Luo. C^3 -GAN+: Complex-Condition-Controlled Generative Adversarial Networks with Enhanced Embeddings. <i>Under submission</i> .	
Conference Presentations	IEEE International Conference on Data Mining (ICDM) Conference Presenter Virtual event, Nov 2020	
	ACM SIGKDD Conference on Knowledge Discovery and Data Mining Conference Presenter Virtual event, Aug 2020	
	Graduate Research Innovation Exchange (GRIE) Poster Presenter Virtual event, Feb 2020	
	IEEE International Conference on Data Mining (ICDM) Conference Presenter Beijing, China, Nov 2019	
	Graduate Research Innovation Exchange (GRIE)	

Poster Presentor

Worcester, MA, Feb 2019

Mentoring Experience	Mentor for Yiqing Zhang , Ph.D. student in Data Science, WPI Project: Activity-Based Travel Demand Modelling for Urban Planning	Spring 2021
	Mentor for Zixuan Zhang , Graduate student in Data Science, WPI Project: Spatial-Temporal Data Analytics For Travel Demand Prediction	Fall 2020
Awards and	ICDM 2020 Student Travel Award	2020
Fellowships	ACM SIGKDD Student Registration Award	2020
	Scholarship for International Students , Stevens Institute Technology	2016-2017
Academic Service	Reviewer for AAAI (2020, 2021), WWW (2020,2021) IJCAI (2019, 2020, 2021), KDD (2019, 2020, 2021), SDM (2020, 2021), ICLR 2021, CIKM (2019, 2020, 2021), ICDM (2020,2021)	
Technical Skills	Python, R, C/C++ PyTorch, TensorFlow, L ^A T _E X, Matlab, SQL	
References	Zhi-Li Zhang Qwest Chair Professor and McKnight Distinguished University Professor Associate Director for Research, Digital Technology Center Department of Computer Science and Engineering University of Minnesota 4-192 Keller Hall, 200 Union Street SE, Minneapolis, MN 55416 Email: zhzhzhang@cs.umn.edu Phone: (612) 625-8568 Yanhua Li Associate Professor Computer Science Department Worcester Polytechnic Institute Atwater Kent 130, 100 Institute Rd, Worcester, MA 01609 Email: yli15@wpi.edu Xun Zhou Associate Professor Department of Business Analytics, Tippie College of Business The University of Iowa S280 PBB 21 East Market Street, Iowa City, IA 52242-1994 Email: xun-zhou@uiowa.edu Phone: (319) 384-3335	