Research

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Current University of California, San Diego, La Jolla, California

APPOINTMENT Assistant Professor, Department of Computer Science and Engineering

July 2020 - Present

**PREVIOUS** Northeastern University, Boston, Massachusetts

APPOINTMENT Assistant Professor, Khoury College of Computer Sciences

Aug 2018 - June 2020

Large-Scale Spatiotemporal Learning, Deep Learning, Tensor Methods, and their applications.

Network Science Institute, College of Engineering, Physics (By Courtesy)

California Institute of Technology, Pasadena, California

 $Postdoctoral\ Scholar,\ Computing\ +\ Mathematical\ Sciences$ 

• Advisors: Anima Anandkumar, Yisong Yue

**EDUCATION** University of Southern California, Los Angeles, California

Ph.D., Computer Science, Computer Science Department

Thesis: Tensor Learning for Large-Scale Spatiotemporal Analysis

Finalist in William F. Ballhaus, Jr. Prize for Excellence in Graduate Engineering Research

Zhejiang University, Hangzhou, Zhejiang, PRC

B.S in Computer Science, Chu Kochen Honors College

Aug 2008 - June 2012

Aug 2017 - Aug 2018

Aug 2012 - Aug 2017

AND HONORS

SELECTED AWARDS AWS Machine Learning Research Awards, Amazon Science, 2020

Adobe Data Science Research Awards, Adobe Research, 2020

Google Faculty Research Award, Google Research, 2019-2020

Best Paper Award, NeurIPS Machine Learning for Public Health, 2020

Best Dissertation Award, University of Southern California, 2018

Best Paper Award, NIPS Time Series Workshop, 2017

SIGKDD Scholarship, ACM 50th Celebration of the Turing Award, San Francisco, 2017

Rising Stars in EECS, 40 Awardees in North America, MIT, 2015

Annenberg Graduate Fellowship, University of Southern California, 2012

Selected in ACM Heidelberg Laureate Forum, University of Heidelberg, 2013

Microsoft 2011 Young Fellowship, Microsoft Research Asia, 2011

International Forum (iF) Design Hanover Global Concept Award, iF, 2010

## SELECTED Conference **PUBLICATIONS**

- [C1] Robin Walters, Jinxi (Leo) Li, Rose Yu "Trajectory Prediction using Equivariant Continuous Convolution", In International Conference on Learning Representations (ICLR), 2021
- [C2] Rui Wang, Robin Walters, Rose Yu "Incorporating Symmetry into Deep Dynamics Models for Improved Generalization", In International Conference on Learning Representations (ICLR), 2021
- [C3] Fan Xie, Alex Chowdhury, Clara De Paolis, Linfeng Zhao, Lawson Wong, Rose Yu "Deep Imitation Learning for Bimanual Robotic Manipulation" In Proceeding of Advances in Neural Information Processing Systems (NeurIPS), 2020
- [C4] Armand Comas Massague, Chi Zhang, Zlatan Feric, Octavia Camps, Rose Yu "Learning Disentangled Representations of Video with Missing Data" In Proceeding of Advances in Neural Information Processing Systems (NeurIPS), 2020
- [C5] Jung Yeon Park, Kenneth Theo Carr, Stephan Zheng, Yisong Yue, Rose Yu "Multiresolution Tensor Learning for Efficient and Interpretable Spatial Analysis" In Proceedings of the 32th International Conference on Machine Learning (ICML), 2020
- [C6] Rui Wang, Adrian Albert, Karthik, Kashinath, Mustafa, Mustafa, Rose Yu. "Towards Physicsinformed Deep Learning for Spatiotemporal Modeling of Turbulent Flows", In Proceeding of ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2020
- [C7] Nima Dehmamy, Albert-László Barabási, Rose Yu. "Understanding the Representation Power of Graph Neural Networks in Learning Graph Topology" In Proceeding of Advances in Neural Information Processing Systems (NeurIPS), 2019
- [C8] Yukai Liu, Rose Yu, Stephan Zheng, Eric Zhan, Yisong Yue. "NAOMI: Non-Autoregressive Multiresolution Sequence Imputation" In Proceeding of Advances in Neural Information Processing Systems (NeurIPS), 2019
- [C9] Yaguang Li, Rose Yu, Cyrus Shahabi, Yan Liu "Diffusion Convolutional Recurrent Neural Network: Data-Driven Traffic Forecasting" In Proceedings of International Conference on Learning Representations (ICLR), 2018
- [C10] Rose Yu, Guangyu Li, Yan Liu. "Tensor regression meets Gaussian Processes." In Proceedings of International Conference on Artificial Intelligence and Statistics (AISTATS), 2018

## Talks

SELECTED INVITED AAAI 2020 Symposium on Physics-Guided AI for Accelerating Scientific Discovery

Nov 2020

Physics Informed Machine Learning workshop, Los Alamos National Lab

Jan 2020

ICLR 2019 Workshop on Deep Generative Models, New Orleans

May 2019

Keynote Speaker, Climate Informatics 2018 (CI 2018),

Sep 2018

Henry L. Pierce Laboratory Seminar Series, MIT,

Sep 12, 2018

## ACADEMIC SERVICE Workshop Co-organizer

NeurIPS Workshop on Machine Learning for Engineering, 2020

ICML Time Series Workshop, 2019

ICML Time Series Workshop, 2017

NIPS Woman in Machine Learning Workshop, 2016

NIPS workshop on Learning with Tensors: Why Now and How? (Tensor-Learn), 2016

## Senior Program Committee (or Area Chair)

ICML(2021, 2020), ICLR (2021), NeurIPS (2020), AAAI (2020, 2021), IJCAI (2020), SDM (2020)