

YI HUANG

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EMPLOYMENT

Postdoctoral Scholar, *University of Chicago* 10/2017-03/2021
Research Associate, *Brookhaven National Lab* 03/2021 - present

EDUCATION

Ph.D. in Mathematics, *University of Illinois at Chicago, Chicago, IL* 2017
dissertation title: “*Problems in Learning under Limited Resources and Information*”, advised by
Lev Reyzin
M.S. in Mathematics, *Georgia Institute of Technology, Atlanta, GA* 2010
B.S. in Computational Sciences, *Nankai University, Tianjin, China* 2004

RESEARCH TOPICS

deep neural networks, Computer vision, machine learning

AWARDS AND RECOGNITION

- **Program Committee member**
 - International Conference on Artificial Intelligence and Statistics (AISTAT 2022, 2023)
 - ACM International Conference on Multimedia (ACM MM 2022)
 - International Joint Conferences on Artificial Intelligences (IJCAI 2020, 2021, 2022)
 - International Symposium on Artificial Intelligence and Mathematics (ISAIM 2020)
 - European Conference on Artificial Intelligence, (ECAI 2020)
- **Referee**
 - Applied Network Sciences
- **Graduate teaching award, 2013–2014**, Mathematics, Statistics, & Computer Science, UIC

PUBLICATIONS AND PREPRINTS

- Yihui Ren Dmitrii Torbunov, Yi Huang, Haiwang Yu, Jin Huang, Shinjae Yoo, Meifeng Lin, Brett Viren, “UVCGAN: UNet Vision Transformer Cycle-Consistent GAN for Unpaired Image-to-Image Translation”, **WACV 2023**
- Yi Huang, Victor Rotaru, Ishanu Chattopadhyay, “Sequence Likelihood Divergence For Fast Time Series Comparison”, **Knowledge and Information Systems 2022**
- Victor Rotaru, Yi Huang, Timmy Li, James Evans, Ishanu Chattopadhyay, “Event-level Prediction of Urban Crime Reveals a Signature of Enforcement Bias in US Cities”, **Nature, Human Behaviour 2021**
- Yi Huang, Ishanu Chattopadhyay, “Universal Risk Phenotype of US Counties for Flu-Like Transmission to Improve County Specific COVID-19 Incidence Forecasts”, **PLOS, Computational Biology 2021**
- Dmytro Onishchenko1, Yi Huang, James van Horne, Peter J. Smith, Michael M. Sall, Ishanu Chattopadhyay, “Reduced False Positives in Autism Screening via Digital Biomarkers Inferred from Deep Comorbidity Patterns”, **Science Advances 2021**
- Victor Rotaru, Yi Huang, Ishanu Chattopadhyay, “Process-aware Fast Time Series Clustering and Classification Based on Hidden Stochastic Generators of Physical Processes”, **AAAI-MLPS 2021**
- Yi Huang, Yihui Ren, Shinjae Yoo, Jin Huang, “Efficient Data Compression for 3D Sparse TPC via Bicephalous Convolutional Autoencoder”, **ICMLA 2021**

- Tingran Gao, Shahab Asoodeh, Yi Huang, James Evens, “Wasserstein Soft Label Propagation on Hypergraphs: Algorithm and Generalization Error Bounds”, **AAAI** 2019
- Shahab Asoodeh, Yi Huang, Ishanu Chattopadhyay, “A Tamper-Free Semi-Universal Communication System for Deletion Channels”, **CDC** 2018
- Yi Huang, Mano Vikash Janardhanan, Lev Reyzin, “Network Construction with Ordered Constraints”, “**FSTTCS** 2017”
- Benjamin Fish, Yi Huang, Lev Reyzin, “Recovering Social Network by Observing Votes”, **AAMAS** 2016
- Yi Huang, Brian Powers, Lev Reyzin, “Training-Time Optimization of a Budgeted Booster”, **IJCAI** 2015