XINYI WU

Curriculum Vitae (October 2022) xinyiwu@mit.edu \(\pi \) xinyiwu98.github.io

EDUCATION

Massachusetts Institute of Technology (MIT) Institute for Data, Systems and Society (IDSS) PhD in Social & Engineering Systems

Cambridge, MA

2020 -

Washington University in St. Louis

Bachelor of Arts in Mathematics, $Summa\ Cum\ Laude$

St. Louis, MO 2016 — 2020

Second major: Economics

RESEARCH INTERESTS

My main research interests include graph theory, network science and machine learning. Recently I have been working on higher-order network modelling and analysis, and theory of graph representation learning.

PUBLICATIONS

- 2. **X. Wu**, Z. Chen, W. W. Wang, A. Jadbabaie, "A Non-Asymptotic Analysis of Oversmoothing in Graph Neural Networks," *under review*, 2022.
- 1. **X. Wu**, A. Sarker, A. Jadbabaie, "Link Partitioning on Simplicial Complexes Using Higher-Order Laplacians," *Proceedings of the IEEE International Conference on Data Mining (ICDM)*, 2022.

HONORS

| • IEEE ICDM Student Travel Award | 2022 |
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| • Michael Hammer Fellowship, MIT | 2020 |
| • Phi Beta Kappa, Beta of Missouri at Washington University | 2020 |
| • Highest Distinction in Mathematics, Washington University in St. Louis | 2020 |
| • Distinction in Economics, Washington University in St. Louis | 2020 |
| • Ross Middlemiss Prize in Mathematics, Washington University in St. Louis | 2020 |
| Brian Blank Prize in Mathematics Washington University in St. Louis | 2019 |

TEACHING

TA for 1.022 Introduction to Network Models (MIT)

Fall 2021, Fall 2022

SKILLS

Programming

• Python, MATLAB, R, Java, C++, STATA, LATEX

Languages

• English (fluent), Chinese (native), French (advanced)