# Xueqi Cheng

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## SUMMARY OF QUALIFICATION

In-depth knowledge and research experience in geometric deep learning and social network analysis, with a keen interest in deep learning on complex graphs, out-of-distribution generalization, and imbalanced learning on graphs.

#### **EDUCATION**

Vanderbilt UniversityNashville, TNPh.D. in Computer ScienceAug. 2021 - presentUniversity of MichiganAnn Arbor, MIM.S.E. in Civil Engineering (Structures)Aug. 2018 - Dec. 2019Southwest Jiaotong University (SWJTU)Chengdu, ChinaB.S. in Civil Engineering (Bridge Engineering)Sep. 2014 - Jul. 2018

#### Research Experiences

## Network and Data Science (NDS) Lab

Ph.D. student, Computer Science Department

May. 2023 – present Vanderbilt University

- Research topics: Deep learning on complex graphs, out of distribution generalization, and imbalanced learning on graphs
- Advisor: Dr. Tyler Derr

## Baroud Research Group (BRG)

Aug.  $2021 - \text{May.} \ 2023$ 

Ph.D. student, Civil and Environmental Engineering Department

Vanderbilt University

- Research topics: Machine learning, network modeling, resilience assessment
- Advisor: Dr. Hiba Baroud

#### Resilient and Efficient Structures Laboratory (RESLab)

Jan. 2019 – Dec. 2019

M.S. student, Department of Civil and Environmental Engineering

University of Michigan, Ann Arbor

- Research topics: Performance-based wind engineering
- Advisor: Dr. Seymour M.J. Spence

## EMPLOYMENT

## Southwest Jiaotong University Chengdu Design Institute Co., Ltd.

Jul. 2016 - Aug. 2016

Research Engineer Intern, Team of Bridge Design

Chengdu, China

- Research topics: VR technology, bridge conceptual design
- Advisor: Dr. Wei He

## SELECTED PUBLICATIONS

- 1. Zhang, Yi, Yuying Zhao, Zhaoqing Li, **Xueqi Cheng**, Yu Wang, Olivera Kotevska, Philip S. Yu, and Tyler Derr. "A Survey on Privacy in Graph Neural Networks: Attacks, Preservation, and Applications." arXiv preprint arXiv:2308.16375 (2023).
- 2. Zhao, Yuying, Yu Wang, Yunchao Liu, **Xueqi Cheng**, Charu Aggarwal, and Tyler Derr. "Fairness and Diversity in Recommender Systems: A Survey." arXiv preprint arXiv:2307.04644 (2023).
- 3. **Cheng, Xueqi**, Yan Zhang, Sining Lu, Yinqiao Zhu, and Wei He. "Urban Bridge Conceptual Design Based on Virtual Reality Graphic Engine." In *IABSE Symposium Report*, vol. 108, no. 1, pp. 74-75. International Association for Bridge and Structural Engineering, 2017.

#### Symposiums and Workshops

1. Cheng, Xueqi. Urban Bridge Conceptual Design Based on Virtual Reality Graphic Engine. International Association for Bridge and Structural Engineering (IABSE) Symposium, presentation, 2017.

## SCHOLARSHIPS AND AWARDS

- Engineering Graduate Fellowship from Vanderbilt University 2023 present
- IBM Ph.D. Fellowship from Vanderbilt University 2021 present
- National Encouragement Scholarship 2015, 2016
- Merit Student of SWJTU 2015, 2016
- Best Debater in Freshman Debate Competition held by the School of Civil Engineering, SWJTU 2014

## Guest Lectures

• Intro to PyTorch and PyG

CS 4352/5352: Social Network Analysis at Vanderbilt University, Oct. 2023

## ACADEMIC SERVICES

- PC Member IEEE workshop BigData CTA3'23
- Reviewer ICWSM'24, WSDM'24, AAAI'24

## EXTRACURRICULAR ACTIVITIES

- President, University Student Entrepreneurship Incubation Association of SWJTU Jun. 2016 May. 2017
- Volunteer Teacher, Tuoxin Primary School, Anhui, China Jun. 2015 Aug. 2015

# Teaching

- TA for CS 4352/5352: Social Network Analysis at Vanderbilt University Aug. 2023 Dec. 2023
- TA for CE 2200: Statics at Vanderbilt University Jan. 2023 May. 2023
- TA for CE 3205: Structural Design at Vanderbilt University Jan. 2022 May. 2022
- TA for CE 3200: Structural Analysis at Vanderbilt University Aug. 2021 Dec. 2021