Sijing Tu

Curriculum Vitæ

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Lindstedtsvägen 5, Plan 5, 10044 Stockholm
Division of Theoretical Computer Science
School of Electrical Engineering and Computer Science
KTH Royal Institute of Technology

Education

2020–Pres. **Ph.D. Candidate in Computer Science**, KTH Royal Institute of Technology, Sweden.
Expected graduation: Spring 2025. Advisor: Aristides Gionis.

2016–2020 **M.Sc. in Machine Learning, Data Science, and Artificial Intelligence**, Aalto University, Finland.
Research Assistant in 2019-2020. Advisor: Aristides Gionis.

2011–2015 **B.Eng. in Information Security**, Huazhong University of Science and Technology, China.
Research Assistant in 2015-2016. Advisor: Kun He.

Research Visits

2024 **University of Padova**, Italy. Host: Leonardo Pellegrina, June-July.

2022 **University of Ioannina**, Greece. Host: Panayiotis Tsaparas, May-July.

Publications

2025 **Sequential Diversification with Provable Guarantees**.
The 18th ACM International Conference on Web Search and Data Mining, WSDM'25 (to appear)
Wang, H; Tu, S; Gionis, A

2024 **The Impact of External Sources on the Friedkin–Johnsen Model**.
33rd ACM International Conference on Information and Knowledge Management, CIKM'24
Out, C; Tu, S; Neumann, S; Zehmakan, AN. doi:10.1145/3627673.3679780

2023 **Adversaries with Limited Information in the Friedkin-Johnsen Model**.
29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, KDD'23
Tu, S; Neumann, S; Gionis, A. doi:10.1145/3580305.3599255
🖼: 2306.10313 | SijingTu/KDD-23-Adversaries-With-Limited-Information

2022 **A Viral Marketing-Based Model For Opinion Dynamics in Online Social Networks**.
The Web Conference 2022
Tu, S; Neumann, S. doi:10.1145/3485447.3512203
🖼: 2202.03573 | SijingTu/WebConf-22-Viral-Marketing-Opinion-Dynamics

2020 **Co-exposure Maximization in Online Social Networks**.
Thirty-fourth Annual Conference on Neural Information Processing Systems, NeurIPS'20
Tu, S; Aslay, C; Gionis, A. link: 10.5555/3495724.3495996

2020 **Tell me Something My Friends do not Know: Diversity Maximization in Social Networks**.
Knowledge and Information Systems
Matakos, A; Tu, S; Gionis, A. doi:10.1007/s10115-020-01456-1

Manuscript

2024 **OptiRefine: Densest Subgraphs and Maximum Cuts with k Refinements**.
Tu, S; Stankovic, A; Neumann, S; Gionis, A. *Under submission*

Presentations and Seminars

2024 **80% Seminar** at KTH
Title: Algorithmic Approaches to Online Social Network Challenges
Opponent: Ioana O. Bercea, KTH

Seminar at University of Padova
Title: Algorithmic Approaches to Online Social Network Challenges

2023 **KDD**, conference presentation
Title: Adversaries with Limited Information in the Friedkin–Johnsen Model

2022 **The Web Conference**, conference presentation, virtual event
Titile: A Viral Marketing-Based Model For Opinion Dynamics in Online Social Networks

50% Seminar at KTH
Title: Combating Bias and Polarization in Social Networks
Opponent: Tijl De Bie, Ghent University

2021 **Data Science Seminar** at KTH
Title: Co-exposure Maximization in Online Social Networks

2020 **NeurIPS**, conference poster session, virtual event
Title: Co-exposure Maximization in Online Social Networks

Program Committees

2024 KDD'24, ACML'24, SDM'25

2023 KDD'23, SDM'24

Other Research Activities

2024 Aarhus Summer School on Learning Theory, Aarhus University, August 19-22
Website: conferences.au.dk/asslt

2023 ECMLPKDD'23, PhD Forum, Torino, September 18-22
Poster: *Adversaries with Limited Information in the Friedkin-Johnsen Model*

2023 23rd Max Planck Advanced Course on the Foundations of Computer Science, Saarbrücken, August 21-25
Topic: Algorithmic Foundations of Data Analysis
Website: conferences.mpi-inf.mpg.de/adfocs-23/

2022 Swedish Summer School in Computer Science, KTH, June 26-July 2
Topics: *The Method of Moments in Computer Science and Beyond* by Ankur Moitra, and *Polyhedral Techniques in Combinatorial Optimization* by Ola Svensson
Website: s3cs.eecs.kth.se

Teaching Assistant

2022–2024 **Machine Learning, Advanced Course**, KTH master's level course
Responsibilities included proposing new problems, conducting Q&A sessions, and grading assignments and project reports. Teaching commitment: 80–120 academic hours.

2021–2023 **Advanced Algorithms**, KTH master's level course
Responsibilities included holding exercise sessions, grading assignments, and evaluating project reports. Teaching commitment: 80–120 academic hours.

2021–2022 **Algorithms and Complexity**, KTH master's level course
Responsibilities included holding exercise sessions and grading assignments. Teaching commitment: 80 academic hours.