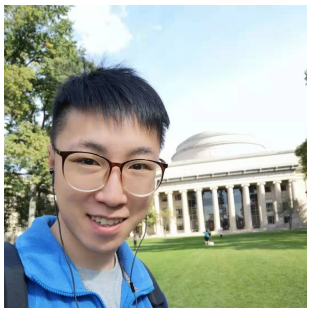

DING LYU (吕丁)

Born on Dec. 25, 1996
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EDUCATION

Ph.D. candidate (Supervisor: Prof. Xiaofan Wang) Sep. 2024 – Sep. 2017
Control Science and Engineering,
School of Electronic Information and Electrical Engineering Shanghai Jiao Tong Univerisity

Visiting Ph.D. student (Supervisor: Prof. Alex Pentland) Aug. 2020 – Sep. 2019
Human Dynamics Group, Media Lab Massachusetts Institute of Technology

Bachelor's degree Jun. 2017 – Sep. 2013
Automation (卓越工程师计划), School of Control Science and Engineering Shandong University

RESEARCH INTEREST

Computational social science
Empirical analysis of social networks to explore and explain human behavior in complex social systems.

Adversarial game of networks
Modeling adversarial games of multi-agent systems from a network perspective and reinforcement learning.

Graph machine learning
Developing temporal graph neural networks for understanding the mechanisms of network evolution and dynamics.

EXPERIENCE

Intern Algorithm Engineer, Machine Learning Oct. 2021 – Jul. 2021
Department of Ant Group-Security and Risk Management-Machine Intelligence Ant Group

PUBLICATIONS

J1. **Ding Lyu**, Yuan Yuan, Lin Wang, Xiaofan Wang, and Alex Pentland. Investigating and Modeling the Dynamics of Long Ties. Communications Physics (Nature Portfolio) 2022.

J2. **Ding Lyu**, Yansong Teng, Lin Wang, Xiaofan Wang, and Alex Pentland. An Experimental Study of Tie Transparency and Individual Perception in Social Networks. Proceedings of the Royal Society of A: Mathematical, Physical, and Engineering Sciences 2022.

J3. **Ding Lyu**, Hanxiao Liu, Lin Wang, and Xiaofan Wang. A Two-network Adversarial Game: Model, Strategy, and Structure. Communications in Nonlinear Science and Numerical Simulation 2024.

J4. **Ding Lyu**, Hanxiao Liu, Lin Wang, and Xiaofan Wang. Evolution of Cooperation in a Mixed Cooperative-competitive Structured Population. Physica A: Statistical Mechanics and its Applications 2024.

J5. Shuyang Shi, **Ding Lyu**, Lin Wang, Xiaofan Wang, and Guanrong Chen. Characterizing Regional Importance in Cities with Human Mobility Motifs of Metro Networks. arXiv.

J6. Hanxiao Liu, Yuqing Ni, **Ding Lyu**, Xiaoqiang Ren, and Xiaofan Wang. Subsystem-importance-aware DoS Attacks and Countermeasures. Automatica 2024.

C1. **Ding Lyu**, Yuan Yuan, Lin Wang, Xiaofan Wang, and Alex Pentland. "Investigating and Modeling the Dynamics of Long Ties", NetSci 2022.

C2. **Ding Lyu**, Yuan Yuan, Lin Wang, Xiaofan Wang, and Alex Pentland. "Investigating and Modeling the Dynamics of Long Ties", International Conference on Computational Social Science (IC2S2 2022).

C3. **Ding Lyu**, Yansong Teng, Lin Wang, Xiaofan Wang, and Alex Pentland. "Tie Transparency in Social Networks", International Conference on Computational Social Science (IC2S2 2020).

C4. Xuhong Wang, **Ding Lyu**, et al. APAN: Asynchronous Propagate Attention Network for Real-time Temporal Graph Embedding, International Conference on Management of Data (SIGMOD 2021).

PATENTS

P1. "一种针对信息物理系统远程状态估计的拒绝服务攻击方法" ZL 2022 1 1555276.7, 第三发明人

DEVELOPMENTS

I developed and deployed an online platform (https://adversarialgame.dinglyu.cn/) of adversarial games between two networked systems. The platform is based on Django, MySQL, HTML5, CSS, and JQuery. The user guide is shared on Github (https://github.com/DingLyu/adversarial-game-platform).