Langzhou He

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## EDUCATION

# Southwest University

Bachelor of Science in Computer Science; GPA: 3.9/4.0

Chongqing, China

Sep. 2020 - June. 2024

Email: leolouis@foxmail.com

Coursework: Mathmatical Analysis, Linear Algebra, Probability and Statistics, Operating System Theory,
C++ Programming, Design and Analysis of Algorithms, Computer Networks, Data Structure, Discrete
Mathematics, Computer Vision, Machine Learning, Data Mining.

## EXPERIENCE

# Dartmouth College, Department of Computer Science

Hanover, USA

Research Assistant, advised by Professor Yujun Yan

June 2023 - Jan 2024

- Working on developing principles for graph-based ML models that are both expressive and generalisable
- $_{\bullet}$  Data Science and Network Intelligence Laboratory, Southwest University

Chongqing, China Nov 2020 - present

- Research Assistant, advised by Professor Li Tao, Chao Gao
  - Explored multi-agent deep reinforcement learning techniques. Developd a reinforcedment learning method to identify influential nodes in large-scale real networks while combining the strengths of both temporal heterogeneity and distributed local policy selection.
  - Proposed a new measure and summarized three main temporal features for node pairs in temporal networks and integrate them using weighted arithmetic mean.
  - Verified the effectiveness of the proposed temporal neighborhood change centrality and conducted experiments on various temporal networks.

### Publications

- 1: L. He, S. Wang, J. Wang, C. Gao and L. Tao. Integrating Global Features into Neural Collaborative Filtering. Knowledge Science, Engineering and Management (KSEM), pp 325-336, 2022.
- 2: H. Liu, L. He, F. Zhang, Z. Wang, and C.Gao. Dynamic community detection over evolving networks based on the optimized deep graph infomax, *Chaos 32*, 053119 (2022).
- 3: X. Qi, L. He, J. Wang, Z. Du, Z. Luo and X. Li. A Multi-objective Evolutionary Algorithm Based on Multi-layer Network Reduction for Community Detection, *Knowledge Science, Engineering and Management (KSEM)*, pp 141-152, 2022.
- 4: S. Kong, L. He, G. Zhang, L. Tao and Z. Zhang, Identifying Multiple Influential Nodes for Complex Networks Based on Multi-Agent Deep Reinforcement Learning, *Pacific Rim International Conference on Artificial Intelligence (PRICAI)*, pp 120-133, 2022.
- 5: L. Tao, S. Kong, L. He, F. Zhang, X. Li, T. Jia and Z. Han, A Sequential-Path Tree-Based Centrality for Identifying Influential Spreaders In Temporal Networks. *Chaos, Solitons & Fractals*, Volume 165, Part 1, 2022.
- 6: Z. Wu, L. He, L. Tao, Y. Wang, Z. Zhang, Temporal Neighborhood Change Centrality for Important Node Identification in Temporal Networks, *International Conference on Neural Information Processing*, pp 455-467, 2023.
- 7: J. Wu, L. He, J. Tao and L. Tao, Temporal Link Prediction Based on Node Dynamics, *Chaos, Solitons & Fractals*, Volume 170, 113402, 2023.

# SKILLS LIST

- Languages: English (IELTS:7.0/9.0, TOEFL 96/120), Chinese (native language)
- Programming: C/C++, C#, Python, Pytorch, TensorFlow, LATEX, Markdown

### **OTHERS**

• Awards: Academic Science Award(1%), Merit Student of University (5%), Second-tier Scholarship (10%)