

Haoye Lu Email & Homepage & LinkedIn & Google Scholar &

# Haoye Lu

### Education

Sep. 2021 - Present, University of Waterloo and Vector Institute

Ph.D. in Computer Science (supervised by Yaoliang Yu, CGPA 98.5/100)

Jan. 2017 - April 2019, University of Ottawa

Master of Computer Science (supervised by Amiya Nayak, CGPA 10/10, Outstanding Thesis Nomination)

Thesis: Function optimization-based schemes for designing continuous action learning automata ♂

Sep. 2013 - Dec. 2016, University of Ottawa

BSc Joint Honors in Computer Science and in Mathematics (CGPA 9.98/10, University Silver Medal)

# Experience

May 2022 - Aug. 2022, Research Internship, National Research Council Canada

• Focus on representation learning on graphs.

May 2019 - Aug. 2021, Research Associate, University of Ottawa

- Focus on research in deep learning.
- Develop crack detection-related algorithms using machine learning techniques.

Sep. 2017 - April 2021, Teaching Assistant, University of Ottawa

- TA for a Java programming course (Winter 2019)
- TA for a Python programming course (Fall 2017 and Fall 2018)
- Head TA for an Operating System course (Winter 2018)

May 2015 - Dec. 2016, Research Assistant, University of Ottawa, EECS

· Doing research related to networks and community detections

May 2014 - Aug. 2014, Research Assistant, University of Ottawa, Dept. of Math. & Stat.

• Programming on Maplesoft computing system (mathematical computing software)

## **Awards**

- 1. 2022, Canada Graduate Scholarships Doctoral, NSERC
  - Upgraded from Postgraduate Scholarship Doctoral in Oct, 2022.
- 2. 2022, Ontario Graduate Scholarship (OGS), declined.
- 3. 2021, GO-Bell Scholarships, University of Waterloo
- 4. 2021, David R. Cheriton Graduate Scholarship, University of Waterloo
- 5. 2019, Outstanding Master's Thesis Nomination, University of Ottawa
  - The only thesis nominated by the Faculty of Engineering.
- 6. 2017-2018, Full International Admission Scholarship, University of Ottawa
- 7. 2017, University Silver Medal, University of Ottawa
  - For the 2nd-highest academic standing in an honors bachelor program in the Faculty of Science
- 8. 2016, Yvon Grandchamp Scholarship, University of Ottawa, Dept. of Math. & Stat.
- 9. 2014-2016, Dean's Honor List, University of Ottawa
- 10. 2013–2016, Nortel Networks Admission Scholarship, University of Ottawa
- 11. 2015, Wong-Ng Scholarship, University of Ottawa
- 12. 2015, Merit Scholarship, University of Ottawa
- 13. 2014, Viktor Linis Award in Math., University of Ottawa, Dept. of Math. & Stat.

#### Services

- 1. Top 10% reviewer of ICML 2022
- 2. Reviewer of ICML 2023, Neurips 2022, AISTATS 2022, IEEE GLOBECOM 2017
- 3. Reviewer of IEEE Transactions on Cybernetics

# **Papers**

# **Conference Papers**

- [c1] **Haoye Lu**, Daniel Herman, and Yaoliang Yu, "Multi-Objective Reinforcement Learning: Convexity, Stationarity and Pareto Optimality ♂", in *ICLR*, May 2023.
- [c2] Haoye Lu, Yongyi Mao, and Amiya Nayak, "On the dynamics of training attention models 

  "", in ICLR, May 2021.
- [c3] Haolong Zhang, Amit Nayak, and **Haoye Lu**, "Periodic time series data classification by deep neural network ♂", in *ICT*, April 2019.
- [c4] Haoye Lu, Anand Srinivasan, and Amiya Nayak, "Period detection and future trend prediction using machine learning techniques and in IEEE SmartData, Aug. 2018.
- [c5] Soom Behera, **Haoye Lu**, and Amiya Nayak, "Performance evaluation of community detection algorithms based on relationship strength measurement "c7", in *ICUFN*, July 2018.
- [c6] Modhawi Alotaibi, **Haoye Lu**, and Amiya Nayak, "A hierarchical approach to handle inter-domain mobility in SDN-based networks using mobile IP &", in *ICT*, June 2018.
- [c7] Haoye Lu, Michel Barbeau, and Amiya Nayak, "Economic no-key semi-quantum direct communication protocol 2", in *IEEE Globecom Workshops*, Dec. 2017.
- [c8] **Haoye Lu**, Anand Srinivasan, and Amiya Nayak, "Learning automata based method for solving demand and supply problem with periodic behaviors ♂", in *IEEE BigData*, Dec. 2017.

# Journal Papers

- [j1] Haoye Lu, Haolong Zhang, and Amit Nayak, "A deep neural network for audio classification with a classifier attention mechanism ?", preprint.
- [j2] Xiaoxu Liu, Haoye Lu, and Amiya Nayak, "A Spam Transformer Model for SMS Spam Detection", in IEEE Access, 2021.
- [j3] Haolong Zhang, Haoye Lu, and Amiya Nayak, "Periodic time series data analysis by deep learning methodology ♂", in IEEE Access, 2020.
- [j4] Haoye Lu, Michel Barbeau, and Amiya Nayak, "Keyless semi-quantum point-to-point communication protocol with low resource requirements of ", in Scientific Reports, 2019.
- [j5] **Haoye Lu** and Amiya Nayak, "A scheme to design community detection algorithms in various networks "c", in *Future Internet*, 2019.