Haoye Lu

Email
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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, NSERC Postgraduate Scholarships – Doctoral.
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 Neurips 2022, AISTATS 2022, IEEE GLOBECOM 2017
3. Reviewer of IEEE Transactions on Cybernetics

Papers

Conference Papers

[c1] **Haoye Lu**, Yongyi Mao, and Amiya Nayak, "On the dynamics of training attention models", in *ICLR*, May 2021.

[c2] Haolong Zhang, Amit Nayak, and **Haoye Lu**,"Periodic time series data classification by deep neural network", in *ICT*, April 2019.

[c3] **Haoye Lu**, Anand Srinivasan, and Amiya Nayak, "Period detection and future trend prediction using machine learning techniques", in *IEEE SmartData*, Aug. 2018.

[c4] Soom Behera, **Haoye Lu**, and Amiya Nayak, "Performance evaluation of community detection algorithms based on relationship strength measurement", in *ICUFN*, July 2018.

[c5] 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.

[c6] **Haoye Lu**, Michel Barbeau, and Amiya Nayak, "Economic no-key semi-quantum direct communication protocol", in *IEEE Globecom Workshops*, Dec. 2017.

[c7] **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", in *Scientific Reports*, 2019.

[j5] **Haoye Lu** and Amiya Nayak, "A scheme to design community detection algorithms in various networks", in *Future Internet*, 2019.