ZHOUHAN LIN

CONTACT INFORMATION

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GitHub https://github.com/hantek Homepage https://hantek.github.io

Google Scholar Page https://scholar.google.ca/citations?user=LNZ4efwAAAAJ&hl=en

EDUCATION

Mila, University of Montreal

Sep. 2014 - Jun. 2019 (Exp.)

Department of Computer Science and Operational Research

Ph.D., Supervisor: Yoshua Bengio

Harbin Institute of Technology

Aug. 2012 - Jul. 2014

Department of Electronics and Information Engineering

M.Sc., Supervisor: Yushi Chen

Honored Masters Graduate of HIT (2/36)

Excellent Masters Thesis (2/36)

Harbin Institute of Technology

Aug. 2008 - Jul. 2012

Department of Electronics and Information Engineering

B.Sc., (GPA: 85.6/100)

Honored Graduate of HIT (top 10%) Excellent Graduation Thesis (top 5%)

RESEARCH & TECHNICAL STRENGTHS

Research interests Machine Learning, Neural Networks, Natural Language Processing Software & Tools Theano, PyTorch, TensorFlow, C, Python, CUDA, Linux, MATLAB

INDUSTRY EXPERIENCE

Google Inc., Montreal	Oct. 2018 - Dec. 2018
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Student Researcher

Google Inc., New York Jun 2018 - Sep 2018

Summer Intern

Microsoft Research, Montreal Sep. 2017 - May 2018

Student Researcher

IBM Research, New York Jun. 2016 - Oct. 2016

Summer Intern

Mila Lab, Montreal Aug. 2013 - Sep. 2013

Student Intern

Chinese Academy of Sciences, Ningbo Feb. 2012

Undergrad Intern

SELECTED PUBLICATIONS

- 1. Yikang Shen*, **Zhouhan Lin***, Athul Paul Jacob, Alessandro Sordoni, Aaron Courville, Yoshua Bengio. "Straight to the Tree: Constituency Parsing with Neural Syntactic Distance." arXiv preprint arXiv:1806.04168 (ACL 2018 oral).
- Zhouhan Lin, Minwei Feng, Cicero Nogueira dos Santos, Mo Yu, Bing Xiang, Bowen Zhou and Yoshua Bengio. A Structured Self-attentive Sentence Embedding, arXiv preprint arXiv:1703.03130 (ICLR 2017).
- 3. **Zhouhan Lin**, Matthieu Courbariaux, Roland Memisevic, and Yoshua Bengio. "Neural networks with few multiplications." arXiv preprint arXiv:1510.03009 (2015). (ICLR 2016 oral)
- 4. Athul Paul Jacob*, **Zhouhan Lin***, Alessandro Sordoni, Yoshua Bengio. Learning Hierarchical Structures On-The-Fly with a Recurrent-Recursive Model for Sequences. (ACL workshop, 2018)
- Joachim Ott*, Zhouhan Lin*, Ying Zhang, Shih-Chii Liu, and Yoshua Bengio. "Recurrent Neural Networks with Limited Numerical Precision." arXiv preprint arXiv:1608.06902 (NIPS workshop, 2016).
- 6. **Zhouhan Lin**, Roland Memisevic, and Kishore Konda. "How far can we go without convolution: Improving fully-connected networks." arXiv preprint arXiv:1511.02580 (ICLR workshop, 2016).
- 7. Yikang Shen, **Zhouhan Lin**, Chin-Wei Huang, Aaron Courville. "Neural Language Modeling by Jointly Learning Syntax and Lexicon." arXiv preprint arXiv:1711.02013 (ICLR 2018).
- 8. Nan Rosemary Ke, Konrad Zolna, Alessandro Sordoni, **Zhouhan Lin**, Adam Trischler, Yoshua Bengio, Joelle Pineau, Laurent Charlin, Chris Pal. "Focused Hierarchical RNNs for Conditional Sequence Processing." arXiv preprint arXiv:1806.04342 (ICML 2018).
- 9. Yoshua Bengio, Dong-Hyun Lee, Jorg Bornschein, and **Zhouhan Lin**. "Towards biologically plausible deep learning." arXiv preprint arXiv:1502.04156 (ICML workshop, 2015).
- Saizheng Zhang*, Yuhuai Wu*, Tong Che, Zhouhan Lin, Roland Memisevic, Ruslan Salakhutdinov, and Yoshua Bengio. "Architectural Complexity Measures of Recurrent Neural Networks." arXiv preprint arXiv:1602.08210 (NIPS 2016).
- 11. Iulian V. Serban, Chinnadhurai Sankar, Mathieu Germain, Saizheng Zhang, **Zhouhan Lin**, Sandeep Subramanian, Taesup Kim. "A Deep Reinforcement Learning Chatbot." arXiv preprint arXiv:1709.02349 (NIPS demonstration, 2017).
- 12. Yushi Chen, **Zhouhan Lin**, Xing Zhao, Gang Wang, and Yanfeng Gu. "Deep learning-based classification of hyperspectral data." IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 7, no. 6 (2014): 2094-2107.
- 13. **Zhouhan Lin**, Yushi Chen, Xing Zhao, and Gang Wang. "Spectral-spatial classification of hyperspectral image using autoencoders." In Information, Communications and Signal Processing, 9th International Conference on, pp. 1-5. IEEE, 2013. (ICICS 2013 oral)
- 14. Yushi Chen, **Zhouhan Lin**, and Xing Zhao. "Riemannian manifold learning based k-nearest-neighbor for hyperspectral image classification." In 2013 IEEE International Geoscience and Remote Sensing Symposium-IGARSS, pp. 1975-1978. IEEE, 2013. (IGARSS 2013 oral)
- (*) indicates equal contribution. For more papers please refer to my Google Scholar page: https://scholar.google.ca/citations?user=LNZ4efwAAAAJ&hl=en

HONORS AND AWARDS

- AdeptMind Scholarship, 2018
- ICLR Travel Award, 2016, 2017, 2018

- 2nd Place in NIPS Demonstration, 2017
- Best workshop paper mention, NIPS 2016
- First-class Scholarship, 2012, 2013
- People's Scholarship, 2011
- Shinchang Corporation Scholarship, 2010
- Freshman Foundation for Research and Innovation, 2008

PROFESSIONAL SERVICES

NeurIPS (and former NIPS), ICML, ICLR, AAAI NAACL
Canadian Journal of Remote Sensing Journal of Applied Remote Sensing
IEEE TNNLS, TIP, TGARS, TOC, GRSM, JBHI Applied Soft Computing

TALKS

- Constituency Parsing with Neural Syntactic Distance, Google RMI seminars and New York University, 2018
- Unsupervised Relation Learning between Text Pairs and its Application in Paraphrase Identification, Google RMI seminars, 2018
- Straight to the Tree: Constituency Parsing with Neural Syntactic Distance, ACL, 2018
- Deep Learning and its Financial Applications, Alpine Marco Research Seminar, 2017
- Neural Language Modeling by Jointly Learning Syntax and Lexicon, McGill University, 2017
- Recurrent Neural Networks with Limited Numerical Precision, NIPS workshop on Efficient Methods for Deep Neural Networks, 2016
- A self-attentive Sentence Embedding, Mila, 2016
- Neural Networks with Few Multiplications, ICLR, 2016

MEDIA COVERAGE

- IBM Making Plans to Commercialize Its Brain-Inspired Chip, MIT Tech Review, https://www.technologyreview.com/s/542366/ibm-making-plans-to-commercialize-its-brain-inspired-chip/
- What is self-attention?, Synced, https://www.jiqizhixin.com/articles/100902