

# ZHOUGHAN LIN

## CONTACT INFORMATION

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<b>GitHub</b>	<a href="https://github.com/hantek">https://github.com/hantek</a>
<b>Homepage</b>	<a href="https://hantek.github.io">https://hantek.github.io</a>
<b>Google Scholar Page</b>	<a href="https://scholar.google.ca/citations?user=LNZ4efwAAAAJ&amp;hl=en">https://scholar.google.ca/citations?user=LNZ4efwAAAAJ&amp;hl=en</a>

## EDUCATION

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<b>Mila, University of Montreal</b> Department of Computer Science and Operational Research Ph.D., Supervisor: Yoshua Bengio	<i>Sep. 2014 - Jun. 2019 (Exp.)</i>
<b>Harbin Institute of Technology</b> Department of Electronics and Information Engineering M.Sc., Supervisor: Yushi Chen Honored Masters Graduate of HIT (2/36) Excellent Masters Thesis (2/36)	<i>Aug. 2012 - Jul. 2014</i>
<b>Harbin Institute of Technology</b> Department of Electronics and Information Engineering B.Sc., (GPA: 85.6/100) Honored Graduate of HIT (top 10%) Excellent Graduation Thesis (top 5%)	<i>Aug. 2008 - Jul. 2012</i>

## RESEARCH & TECHNICAL STRENGTHS

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<b>Research interests</b>	Machine Learning, Neural Networks, Natural Language Processing
<b>Software &amp; Tools</b>	Theano, PyTorch, TensorFlow, C, Python, CUDA, Linux, MATLAB

## INDUSTRY EXPERIENCE

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<b>Google Inc., Montreal</b> <i>Student Researcher</i>	Oct. 2018 - Dec. 2018
<b>Google Inc., New York</b> <i>Summer Intern</i>	Jun 2018 - Sep 2018
<b>Microsoft Research, Montreal</b> <i>Student Researcher</i>	Sep. 2017 - May 2018
<b>IBM Research, New York</b> <i>Summer Intern</i>	Jun. 2016 - Oct. 2016
<b>Mila Lab, Montreal</b> <i>Student Intern</i>	Aug. 2013 - Sep. 2013
<b>Chinese Academy of Sciences, Ningbo</b> <i>Undergrad Intern</i>	Feb. 2012

## SELECTED PUBLICATIONS

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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).
2. **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)
5. 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).
10. 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

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- 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

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## PROFESSIONAL SERVICES

<b>Program Committee (Reviewer)</b>	NeurIPS (and former NIPS), ICML, ICLR, AAAI
<b>Journal Reviewer (in early years)</b>	Canadian Journal of Remote Sensing Journal of Applied Remote Sensing IEEE TNNLS, TIP, TGARS, TOC, GRSM, JBHI Applied Soft Computing

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## 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

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## 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>