

# Hongyin Luo

## EMPLOYMENT

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Massachusetts Institute of Technology  
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## EDUCATION

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- 06/2019–06/2022 **Ph.D., Computer Science**  
Massachusetts Institute of Technology, Cambridge, MA, USA  
**Thesis:** Self-training for Natural Language Processing  
**Advisor:** James R. Glass  
**Minor:** Cognitive Science
- 08/2016–05/2019 **Master of Sci., Electrical Engineering and Computer Science**  
Massachusetts Institute of Technology, Cambridge, MA, USA  
**Thesis:** Neural attentions for natural language understanding and modeling  
**Advisor:** James R. Glass
- 09/2012–07/2016 **Bachelor of Eng., Computer Science and Technology**  
Tsinghua University, Beijing, China

## PAST EMPLOYMENT

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- 05/2021–08/2021 **Amazon AWS AI**  
Applied Research Intern
- 05/2020–08/2020 **Google Brain**  
Research Intern
- 03/2015–09/2015 **Department of Psychology, Tsinghua University**  
Research Assistant
- 06/2014–09/2014 **Baidu Inc.**  
Research Intern
- 06/2013–09/2013 **Sogou Inc.**  
Software Engineer Intern

## TEACHING

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Spring 2020	<b>Teaching Assistant</b> MIT 6.864 - Advanced Natural Language Processing
Fall 2019	<b>Teaching Assistant</b> MIT 6.864 - Advanced Natural Language Processing
Spring 2019	<b>Teaching Assistant &amp; Project Mentor</b> MIT 6.862 - Applied Machine Learning

## PROFESSIONAL EXPERIENCE

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06/2022–08/2022	<b>The JSALT 2022 Workshop</b> Senior Member Self-supervised Speech Pre-trained Models for Speech Processing
	<b>Conference &amp; Journal Reviewing</b> COLING (2018, 2021, 2022), Neurips (2022), ACL (2018, 2019, 2020, 2021), EMNLP (2018, 2019, 2020, 2021), NAACL (2021, 2022), IJCAI-PRICAI (2020), WNGT (2020), PRMI (2020), WOHA (2022), JAIR (2019), ARR (2022)

## TALKS & PRESENTATIONS

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07/2022	NAACL 2022, Seattle WA, USA
06/2022	MIT CSAIL Annual Meeting, Cambridge MA, USA
04/2022	CUHK & CPII, Hong Kong SAR, China
03/2022	MIT, Embodied Intelligence Seminar, Cambridge, USA
09/2021	Interspeech 2021, Brno, Czech Republic
09/2021	Amazon Alexa, Seattle WA, USA
06/2021	Workshop on Online Abuse and Harms 2021, Bangkok, Thailand
01/2021	DSTA, Singapore
11/2020	EMNLP-ClinicalNLP 2020, Virtual
09/2020	Interspeech 2020, Shanghai, China
09/2019	Interspeech 2019, Graz, Austria
07/2019	ACL 2019, Florence, Italy
11/2018	EMNLP 2018, Brussels, Belgium
10/2015	EMNLP 2015, Lisbon, Portugal

## PUBLICATIONS

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### Conference

- NAACL '22      **Hongyin Luo**, Shang-Wen Li, Mingye Gao, Seunghak Yu, James Glass, “Cooperative Self-training of Machine Reading Comprehension.” *In Proceedings of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics*.
- NAACL '22      Yung-Sung Chuang, Rumen Dangovski, **Hongyin Luo**, Yang Zhang, Shiyu Chang, Marin Soljai, Shang-Wen Li, Wen-tau Yih, Yoon Kim, James Glass, “DiffCSE: Difference-based Contrastive Learning for Sentence Embeddings.” *In Proceedings of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics*.
- Interspeech '21      **Hongyin Luo**, James Glass, Garima Lalwani, Yi Zhang, Shang-Wen Li, “Joint Retrieval-Extraction Training for Evidence-Aware Dialog Response Selection.” *In Proceedings of Interspeech 2021*.
- Interspeech '20      **Hongyin Luo**, Shang-Wen Li, James Glass, “Prototypical q networks for automatic conversational diagnosis and few-shot new disease adaption.” *In Proceedings of Interspeech 2020*.
- ACL '19      **Hongyin Luo**, Lan Jiang, Yonatan Belinkov, James Glass, “Improving neural language models by segmenting, attending, and predicting the future.” *In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*.
- Interspeech '19      **Hongyin Luo**, Mitra Mohtarami, James Glass, Karthik Krishnamurthy, Brigitte Richardson, “Integrating Video Retrieval and Moment Detection in a Unified Corpus for Video Question Answering.” *In Proceedings of Interspeech 2019*.
- EMNLP '18      **Hongyin Luo**, James Glass, “Learning word representations with cross-sentence dependency for end-to-end co-reference resolution.” *In Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing*.
- IJCAI '16      Jie Fu, **Hongyin Luo**, Jiashi Feng, Kian Hsiang Low, Tat-Seng Chua, “DrMAD: distilling reverse-mode automatic differentiation for optimizing hyperparameters of deep neural networks.” *In Proceedings of the 25th International Joint Conference on Artificial Intelligence*.
- EMNLP '15      **Hongyin Luo**, Zhiyuan Liu, Huanbo Luan, Maosong Sun, “Online learning of interpretable word embeddings.” *In Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing*.

### Workshop & Other Publications

- WOAH '21      Yung-Sung Chuang, Mingye Gao, **Hongyin Luo**, James Glass, Hung-yi Lee, Yun-Nung Chen, Shang-Wen Li, “Mitigating biases in toxic language detection through invariant rationalization.” *In the 5th Workshop on Online Abuse and Harms*.

- MetaNLP '21      **Hongyin Luo**, Shuyan Dong, Yung-Sung Chuang, Shang-Wen Li, “Meta-learning for downstream aware and agnostic pretraining.” *In the 2021 Workshop of Meta Learning and Its Applications to Natural Language Processing*.
- ClinicalNLP '21      **Hongyin Luo**, Shang-Wen Li, James Glass, “Knowledge grounded conversational symptom detection with graph memory networks.” *In the 3th Clinical Natural Language Processing Workshop*.
- Preprint '17      **Hongyin Luo**, Jie Fu, James Glass, “Adaptive bidirectional backpropagation: Towards biologically plausible error signal transmission in neural networks.”

[CV compiled on October 23, 2022]

Cambridge MA, October 23, 2022