Hongyin Luo

Employment

Postdoctoral Associate
Massachusetts Institute of Technology
Computer Science & Artificial Intelligence Laboratory
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Cambridge, MA 02139

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Education

06/2019–05/2022 **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

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

Fall 2022	**Lecturer** MIT Momentum AI
Spring 2020	**Teaching Assistant** MIT 6.864 - Advanced Natural Language Processing
Fall 2019	**Teaching Assistant** MIT 6.864 - Advanced Natural Language Processing
Spring 2019	**Teaching Assistant & Project Mentor** MIT 6.862 - Applied Machine Learning

Professional Experience

06/2022–08/2022 **The JSALT 2022 Workshop**
Senior Member
Self-supervised Speech Pre-trained Models for Speech Processing

Conference & Journal Reviewing
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, 2023), JAIR (2019), ARR (2022)

Talks & Presentations

10/2022	MIT, Embodied Intelligence Seminar, Cambridge, USA
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

Preprints and Submissions

CORR '23 Tianhua Zhang*, **Hongyin Luo***, Yung-Sung Chuang, Wei Fang, Luc Gaitshell, Thomas Hartvigsen, Xixin Wu, Danny Fox, Helen Meng, James Glass "Interpretable Unified Language Checking." *In the The 2023 Conference on Empirical Methods in Natural Language Processing.*

Conference

EACL '23 **Hongyin Luo**, James Glass, "Logic Against Bias: Textual Entailment Mitigates Stereotypical Sentence Reasoning." *In the 17th Conference of the European Chapter of the Association for Computational Linguistics.*

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 April 12, 2023*]

Cambridge MA, April 12, 2023