Lisa Jin

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Education

Ph.D., Computer Science

Aug. 2017–May 2022 (expected)

University of Rochester; Rochester, NY

Advised by Daniel Gildea

Aug. 2017–May 2019

M.S., Computer Science University of Rochester; Rochester, NY

B.S., Computer Science

Sep. 2013–Apr. 2017

University of Michigan; Ann Arbor, MI

Relevant Coursework

Graduate: Machine Vision, Parallel and Distributed Systems, Semantic Parsing, Advanced Algorithms, Machine Learning.

Undergraduate: Linear Algebra and Differential Equations, Introduction to Machine Learning, Information Retrieval and Web Search, Introduction to Operating Systems.

Experience

Research Intern, AI Lab

Jun.-Aug. 2021

Tencent America: Bellevue, WA

- Built neural models for utterance rewriting task to inject past dialogue context into current turn of conversation.
- Improved by large margins over previous state-of-the-art rewriting systems.

Data Science Intern, Data Science Summer Institute

May-Aug. 2018

Lawrence Livermore National Laboratory; Livermore, CA

- Compared drug molecule representations using hierarchical clustering and automatic dendrogram truncation.
- Parallelized computation of large molecular distance matrices.

 $Research\ Intern,\ Center\ for\ Functional\ Connectomics$

Jun.-Aug. 2017

Korea Institute of Science and Technology; Seoul, Korea

- Prototyped method for counting neurons in electron microscopy images.
 - Implemented convolutional neural network for cell segmentation in TensorFlow.

Research Assistant, Dept. of EECS

Aug. 2016–Aug. 2017

University of Michigan; Ann Arbor, MI

- Applied semi-supervised algorithm summarizing temporal networks from fMRI.
- Developed Python visualization tool for exploring time-evolving graphs.

Skills

Languages: C++, C, Python, JavaScript, Ruby.

Frameworks & Scripting: PyTorch, TensorFlow, MATLAB, D3.js.

Publications

Lisa Jin and Daniel Gildea. Rewarding Semantic Similarity under Optimized Alignments for AMR-to-Text Generation. ACL, May 2022. To appear.

Lisa Jin, Linfeng Song, Lifeng Jin, Dong Yu, Daniel Gildea. "Hierarchical Context Tagging for Utterance Rewriting." AAAI, February 2022.

Lisa Jin and Daniel Gildea. "Latent Tree Decomposition Parsers for AMR-to-Text Generation." arXiv preprint arXiv:2108.12304, August 2021.

Lisa Jin and Daniel Gildea. "Tree Decomposition Attention for AMR-to-Text Generation." arXiv preprint arXiv:2108.12300, August 2021.

Lisa Jin and Daniel Gildea. "Generalized Shortest-Paths Encoders for AMR-to-Text Generation". *COLING*, December 2020.

Lisa Jin and Daniel Gildea. "AMR-to-Text Generation with Cache Transition Systems." arXiv preprint arXiv:1912.01682, December 2019.

Lisa Jin. "Text Generation from Abstract Meaning Representation." Area paper, University of Rochester, April 2019.

Neil Shah, Danai Koutra, Lisa Jin, Tianmin Zou, Brian Gallagher, Christos Faloutsos. "On Summarizing Large-Scale Dynamic Graphs." *Data Engineering Bulletin*, September 2017, 40 (3).

Lisa Jin and Danai Koutra. "ECOVIZ: Comparative Visualization of Time-Evolving Network Summaries." *KDD Workshop on Interactive Data Exploration and Analytics*, August 2017.

Service

Reviewer: COLING 2020, ACL 2021-2022.

Teaching

TA, Introduction to Artificial Intelligence, University of Rochester, Fall 2018. TA, Web Databases and Information Systems, University of Michigan, Winter 2017.

Awards & Honors

NSF Research Traineeship (NRT) Fellowship, August 2017 & August 2018. KDD Student Travel Award, July 2017.

Hajim School of Engineering Dean's Fellowship, University of Rochester, March 2017 & August 2018.