Jiaying Lu

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Research Interests

Graph Mining, Knowledge Base, Natural Language Processing.

Education

Emory University, Atlanta, GA USA
Thesis Advisor: Dr. Carl Yang
Ph.D. in Computer Science   *Sep 2019 – Jun 2024 (Expected)*

Beijing University of Posts and Telecommunications, Beijing, China
M.E. in Electronics and Communication Engineering   *Sep 2014 -- Mar 2017*
B.S. in Information Engineering   *Sep 2010 -- Jun 2014*

Publications

- Wenjing Ma, **Jiaying Lu**, Hao Wu. "Cellcano: supervised cell type identification for single cell ATAC-seq data." Under Major Revision at *Nature Communications*. 2022.
- **Jiaying Lu**, Carl Yang. "Open-World Taxonomy and Knowledge Graph Co-Learning." *4th Conference on Automated Knowledge Base Construction*. 2022.
- **Jiaying Lu**, Xin Ye, Yi Ren, Yezhou Yang. "Good, better, best: Textual distractors generation for multi-choice VQA via policy gradient." *CVPR Workshop on Open-Domain Retrieval Under a Multi-Modal Setting*. 2022.
- Hejie Cui, **Jiaying Lu**, Yao Ge, Carl Yang. "How Can Graph Neural Networks Help Document Retrieval: A Case Study on CORD19 with Concept Map Generation." *European Conference on Information Retrieval*. 2022.
- **Jiaying Lu**, Xiangjue Dong, Carl Yang. "Weakly Supervised Concept Graph Generation through Task-Guided Graph Translation." Under Major Revision at *IEEE Transactions on Knowledge and Data Engineering*. 2021.
- **Jiaying Lu**, Jinho D. Choi. "Evaluation of Unsupervised Entity and Event Salience Estimation." *The International FLAIRS Conference Proceedings*. 2021.

Research & Professional Experience

Amazon.com, Sunnyvale, CA USA
Applied Scientist Intern   *May 2022–Aug 2022*
- Multi-modal automated machine learning for large-scale product binary classification problems.

Arizona State University, Tempe, AZ USA
Visiting Student   *Aug 2018 – Jan 2019*
- Proposed a reinforcement learning model to generate distractors for multiple-choice visual questions, advised by *Dr. Yezhou Yang*.

Xiaomi, Search Engine Group, Beijing, China
NLP Engineer   *Jan 2018 – Jul 2018*
- Responsible for word segmentation, named entity recognition modules of the MIUI search engine.
- Developed a sequence tagging model for mining synonym pairs from unstructured text.

Baidu, Search Advertising Group, Beijing, China
NLP Engineer   *Apr 2017 -- Dec 2017*
NLP Engineer Intern   *Oct 2016 -- Mar 2017*
- Participated in core projects that empowered numerous business partners and increased the search engine Ads revenue by millions.
- Applied NLP techniques for dynamic Ad content generation, sentences similarity calculation.

Honors
SIGKDD'22 Student Travel Award.

Services
Program Committee: ICML-IMLH'21, ICCV-CAVMD'21.
Reviewer: ICRA'19, IJCAI'20, BigData'21, CIKM'21, TKDE'21.
Conference Organizing: SIGKDD'22 Web Developer.

Skills
Coding Languages: Python, C&C++, Shell, HTML&CSS, JavaScript, Java, SPARK.
Machine Learning Tools: PyTorch, TensorFlow, DGL, NLTK, Gensim, scikit-learn.