

Education

UNIVERSITY OF CENTRAL FLORIDA – Orlando, FL

- Ph.D. Student, Computer Science. GPA: 3.95/4.0 Expected: May 2021
Advisor: Dr. Fei Liu, UCF Natural Language Processing Group
- B.S., Computer Science. GPA: 3.99/4.0 May 2016

Current Research

ADAPTING THE ENCODER-DECODER MODEL TO MULTI-DOCUMENT SUMMARIZATION

Current abstractive summarization models are very successful at summarizing single documents; however, they cannot be used for multi-document summarization due to lack of large datasets to train the models. To solve this problem, we adapt the state-of-the-art encoder-decoder model – trained on single-document inputs – to summarize multi-document inputs. It exploits the maximal marginal relevance method to select representative sentences from multi-document input, and leverages the encoder-decoder model to fuse disparate sentences to an abstractive summary.

Publications

- Lebanoff, L.,** Song, K., & Liu, F. (2018). Adapting the Neural Encoder-Decoder Framework from Single to Multi-Document Summarization. In Proceedings of the *2018 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, Brussels, Belgium, 2018.
- Lebanoff, L.,** & Liu, F. (2018). Automatic Detection of Vague Words and Sentences in Privacy Policies. In Proceedings of the *2018 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, Brussels, Belgium, 2018.
- Liao, K., **Lebanoff, L.,** & Liu, F. (2018). Abstract Meaning Representation for Multi-Document Summarization. In Proceedings of the *27th International Conference on Computational Linguistics (COLING)*, Santa Fe, New Mexico, USA. (**Area Chair Favorite**)

Experience

GRADUATE RESEARCH ASSISTANT – UCF Natural Language Processing Group – Orlando, FL Jan 2017 – present

- Study/discuss recent papers in deep learning, automatic summarization, NLP, and machine learning.
- Explore extractive and abstractive summarization techniques using deep neural models and classical NLP techniques.

UCF PROGRAMMING TEAM MEMBER – University of Central Florida – Orlando, FL Aug 2015 – Apr 2016

- Solved various programming problems using algorithm-based solutions in Java.
- Competed in the 2015 ACM Southeast USA Regional Contest and placed in 15th out of > 100 teams in the SE region.
- Coded numerous algorithms relating to graphs (DFS, BFS), dynamic programming (Knapsack, Coin change), and more.

SOFTWARE DEVELOPER INTERN - Program Works Inc. – Orlando, FL Nov 2013 – May 2015

- Improved an ASP.Net C# web application which is part of WorkSchedule.Net, an employee scheduling system.
- Created an export for third party integration with standard payroll systems that required overtime calculation, etc.
- Developed a service in C# for a client, Cable News Network (CNN), that synchronizes with their calendar system.

Technical Skills

Programming Languages: Python, Java, C#, JavaScript, C

NLP/ML Tools: TensorFlow, PyTorch, Keras, Theano, Stanford CoreNLP, NLTK

Services & Awards

Conference Reviewer: IJCNLP 2017, EMNLP 2017, AAAI 2018

Awards: University of Central Florida Presidential Doctoral Fellowship, COLING 2018 Area Chair Favorite