Natural Language Processing Ph.D. Student

LOGAN LEBANOFF

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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

IMPROVING CORRECTNESS OF NEURAL ABSTRACTIVE SUMMARIZATION

Current abstractive summarization models are producing high scores according to automatic metrics; however, they often generate incorrect facts. To alleviate this problem, we train a ranking model to choose sentences from the source text the same way that humans do. The selected sentences are concisely merged using a neural abstractive model to form a summary. The abstractive model encodes words in a way that semantic information is shared between coreferent mentions of the same entity. The coreference information informs the model of the correct entities to be replaced or merged.

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