

# LOGAN LEBANOFF

## EDUCATION

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### UNIVERSITY OF CENTRAL FLORIDA – Orlando, FL

- *Ph.D., Computer Science.* (Fall 2016 – present)
- Advisor: Dr. Fei Liu, UCF NLP Group
- *Research interests:* Deep Learning, NLP, Abstractive Summarization, Natural Language Generation

### UNIVERSITY OF CENTRAL FLORIDA – Orlando, FL

- *M.S., Computer Science.* (Fall 2016 – Fall 2019)

### UNIVERSITY OF CENTRAL FLORIDA – Orlando, FL

- *B.S., Computer Science.* (Fall 2013 – Spring 2016)
- GPA: 3.99/4.0

## CURRENT RESEARCH

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### SENTENCE FUSION IN NEURAL ABSTRACTIVE SUMMARIZATION

Current abstractive summarization models are improving quickly. They often perform well at taking important sentences from the document and compressing each sentence. However, they still struggle with fusing multiple sentences together in a coherent manner, and they often generate incorrect facts. I am working on methods to improve sentence fusion in summarization.

## PUBLICATIONS

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Kaiqiang Song, **Logan Lebanoff**, Qipeng Guo, Xipeng Qiu, Xiangyang Xue, Chen Li, Dong Yu, Fei Liu. Joint Parsing and Generation for Abstractive Summarization. In Thirty-Fourth AAAI Conference on Artificial Intelligence, New York, New York, USA. (**AAAI 2020**).

**Logan Lebanoff**, John Muchovej, Franck Dernoncourt, Doo Soon Kim, Seokhwan Kim, Walter Chang, and Fei Liu. Analyzing Sentence Fusion in Abstractive Summarization. In *Summarization Workshop of Empirical Methods in Natural Language Processing*, Hong Kong. (**EMNLP 2019**).

Sangwoo Cho, **Logan Lebanoff**, Hassan Foroosh, and Fei Liu. Improving the Similarity Measure of Determinantal Point Processes for Extractive Multi-Document Summarization. In *Proceedings of the Association for Computational Linguistics*, Florence, Italy. (**ACL 2019**).

**Logan Lebanoff**, Kaiqiang Song, Franck Dernoncourt, Doo Soon Kim, Seokhwan Kim, Walter Chang, and Fei Liu. Scoring Sentence Singletons and Pairs for Abstractive Summarization. In *Proceedings of the Association for Computational Linguistics*, Florence, Italy. (**ACL 2019**).

**Logan Lebanoff**, Kaiqiang Song, and Fei Liu. Adapting the Neural Encoder-Decoder Framework from Single to Multi-Document Summarization. In *Empirical Methods in Natural Language Processing*, Brussels, Belgium. (**EMNLP 2018**).

**Logan Lebanoff**, and Fei Liu. Automatic Detection of Vague Words and Sentences in Privacy Policies. In Proceedings of the *2018 Conference on Empirical Methods in Natural Language Processing*, Brussels, Belgium. (**EMNLP 2018**).

Kexin Liao, **Logan Lebanoff**, and Fei Liu. Abstract Meaning Representation for Multi-Document Summarization. In Proceedings of the *27th International Conference on Computational Linguistics*, Santa Fe, New Mexico, USA. (*Area Chair Favorite*). (**COLING 2018**).

## EXPERIENCE

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### **ADOBE RESEARCH** – San Jose, CA

*Research Intern* (Summer 2019)

- Developed models for incorporating coreference resolution into automatic text summarization models. Will submit to future NLP conference.
- Contributed several models for summarization, semantic similarity, and paraphrase detection to the Adobe Sensei internal machine learning platform.

### **WYCLIFFE ASSOCIATES** – Orlando, FL

*Software Developer Intern* (Summer 2016)

- Created application for translators to efficiently verify Bible translations, using JS and ReactJS.
- Worked in a team in the Agile/Scrum methodology. Front-end and back-end development.

### **UCF PROGRAMMING TEAM** – Orlando, FL

*Programming Team Member* (Fall 2015 – Spring 2016)

- Competed in the 2015 ACM Southeast USA Regional Intercollegiate Programming Contest and placed in 15th out of > 100 teams in the southeast region.
- Coded numerous algorithms relating to graphs (DFS, BFS), dynamic programming (Knapsack, Coin change), data structures (Disjoint set, Binary-indexed tree) and more.

### **COGNITUTOR, LLC** – Winter Haven, FL

*Lead Web Developer* (Fall 2014 – Spring 2016)

- Worked in team of 3 to create website for CogniTutor, a tutoring startup founded by sister, Loni Lebanoff. Included setting up web hosting, domain name, and database.
- Created functionality for registration, log-in, searching for tutors in ASP.NET and SQL Server

### **UCF CENTER FOR RESEARCH IN COMPUTER VISION** – Orlando, FL

*Undergraduate Researcher* (Summer 2015)

- Developed model to count the number of people in images of dense crowds using Convolutional Neural Networks using MATLAB.
- Wrote a CVPR-style paper presenting 7% improvement over previous method.

**PROGRAM WORKS INC.** – Orlando, FL

*Software Developer Intern* (Fall 2013 – Spring 2015)

- Front-end and back-end development in ASP.NET, HTML, CSS, JavaScript
- Created an export for third party integration with standard payroll systems that required overtime calculation and multiple pay levels per employee.
- Developed a service in C# for a client, Cable News Network (CNN), that synchronizes with their calendar system using their REST API.

## TECHNICAL SKILLS

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**Programming Languages:** Python (expert), Java, C#, JavaScript, ReactJS, C, HTML, CSS, Git/GitHub

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

**Related Courses:** Natural Language Processing, Machine Learning, Computer Vision, Advanced Computer Vision, Advanced Artificial Intelligence, Analysis of Algorithms, Data Structures, Processes for Object-Oriented Software Development, Senior Design

## SERVICES & AWARDS

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**Conference Reviewer:** IJCNLP 2017, EMNLP 2017, AAAI 2018, PLOS ONE 2019, AAAI 2020, ACL2020

**Awards:** University of Central Florida Presidential Doctoral Fellowship, COLING 2018 Area Chair Favorite, EMNLP 2018 Student Volunteer, ACL 2019 Student Volunteer, UCF Graduate Presentation Fellowship 2018, 2019, UCF Student Government Association Conference Registration and Travel Award