LOGAN LEBANOFF

EDUCATION

UNIVERSITY OF CENTRAL FLORIDA - Orlando, FL

- Ph.D., Computer Science. (Fall 2016 Fall 2020)
- 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

EXPERIENCE

SOARTECH - Orlando, FL

Artificial Intelligence Engineer II (Spring 2020 – present)

- Create NLP and deep learning solutions to the military's toughest problems.
- Developed a semantic parser which improved on the previous parser from 38% accuracy to 92% accuracy on single intents, and from 5% accuracy to 73% accuracy on multiple intents.
- Incorporated question-answering model into speech application.

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.

PUBLICATIONS

Logan Lebanoff, Charles Newton, Victor Hung, Beth Atkinson, John Killilea and Fei Liu. Semantic Parsing of Brief and Multi-Intent Natural Language Utterances. To be published in the *Second Workshop on Domain Adaptation for NLP*. **(Adapt-NLP in EACL 2021).**

Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Lidan Wang, Walter Chang, and Fei Liu. Learning to Fuse Sentences with Transformers for Summarization. In *Empirical Methods in Natural Language Processing*, Virtual. (**EMNLP 2020**).

Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Walter Chang, and Fei Liu. A Cascade Approach to Neural Abstractive Summarization with Content Selection and Fusion. In *Asia-Pacific Chapter of the Association for Computational Linguistics and the International Joint Conference on Natural Language Processing*, Virtual. (AACL-IJCNLP 2020).

Logan Lebanoff, John Muchovej, Franck Dernoncourt, Doo Soon Kim, Lidan Wang, Walter Chang, and

Fei Liu. Understanding Points of Correspondence between Sentences for Abstractive Summarization. In *Student Research Workshop of the Association for Computational Linguistics*, Virtual. (**ACL 2020**).

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**).

TECHNICAL SKILLS

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

Services: Mentor for Research Experiences for Undergraduates (REU) 2018-2019

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 2018, Amazon Graduate Research Symposium 2019