

# KAIQIANG SONG

(+1)321-203-9755 ◊ kqsong@knights.ucf.edu

Department of Computer Science, HEC 234

University of Central Florida, 4000 Central Florida Blvd Orlando, FL 32816

## EDUCATION

---

**Department of Computer Science, University of Central Florida**  
4th-year Ph.D. Student

*August 2016 - Present*  
Overall GPA: 3.90/4.00

**Department of Computer Science, Fudan University**  
Bachelor of Science

*July 2012 - June 2016*  
Overall GPA: 3.24/4.00

## RESEARCH INTEREST

---

My research focuses on developing automatic summarization systems to generate concise and informative summaries from a large collection of documents to support fast browsing of textual content. My current research work combines natural language processing with cutting-edge deep neural models. I'm also interested in reinforcement learning and other AI-related topics.

- Text Generation and Summarization
- Language Comprehension and Grammar
- Deep Neural Networks
- Reinforcement Learning and other AI-related topics

## RESEARCH EXPERIENCE

---

**University of Central Florida, Orlando, United States**  
*Ph.D Student on Natural Language Processing Advised by Dr. Fei Liu*

August 2016 - present

- Generate title-like summaries for long documents
- Incorporate sentence dependency structure in the neural abstractive summarization system
- Develop tree-based, deep neural decoders for generating grammatical text

**Fudan University, Shanghai, China**

November 2012 - June 2016

*Undergraduate Research on Machine Learning with Dr. Wei Zhang and Dr. Xiangyang Xue*

- Develop image classification models based on hierarchical Gabor filters
- Improve the Faster-RCNN model in a transfer learning setting for pedestrian detection
- Design and develop visualizations to understand LSTM networks

## WORKING EXPERIENCE

---

**Robert Bosch LLC**  
*Sunnyvale, California, USA*

May 2019 - August 2019

- Working on text summarization and Information Retrieval tasks
- As a Natural Language Processing Research Intern
- Under the guidance of Dr. Bingqing Wang and Dr. Zhe Feng
- At Bosch Corporate research, Human Machine Interface Group 2 (CR/HMI-2).

## PUBLICATION

---

- Controlling the Amount of Verbatim Copying in Abstractive Summarization  
**Kaiqiang Song**, Bingqing Wang, Zhe Feng, Liu Ren and Fei Liu  
Accepted by the Thirty-Fourth AAAI Conference on Artificial Intelligence (**AAAI**), 2020.
- Joint Parsing and Generation for Abstractive Summarization  
**Kaiqiang Song**, Logan Lebanoff, Qipeng Guo, Xipeng Qiu, Xiangyang Xue, Chen Li, Dong Yu and Fei Liu  
Accepted by the Thirty-Fourth AAAI Conference on Artificial Intelligence (**AAAI**), 2020.
- Scoring Sentence Singletons and Pairs for Abstractive Summarization  
Logan Lebanoff, **Kaiqiang Song**, Franck Dernoncourt, Doo Soon Kim, Seokhwan Kim, Walter Chang, Fei Liu  
In *The 57th Annual Meeting of the Association for Computational Linguistics (ACL)*, 2019.
- Adapting the Neural Encoder-Decoder Framework from Single to Multi-Document Summarization  
Logan Lebanoff, **Kaiqiang Song**, and Fei Liu  
In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2018.
- Structure-Infused Copy Mechanisms for Abstractive Summarization  
**Kaiqiang Song**, Lin Zhao, and Fei Liu.  
In *Proceedings of the International Conference on Computational Linguistics (COLING)*, 2018.  
(**Oral Presentation**)

## TECHNICAL STRENGTHS

---

<b>Major Programming Languages</b>	Python, C, C++
<b>Other Programming Languages</b>	LaTex, Java, PASCAL, SQL, HTML, R, php, json, VHDL
<b>Deep-Learning Platform</b>	Pytorch, Theano, Tensorflow, Keras

## PROGRAMMING CONTEST ACHIEVEMENTS

---

**Olympiad in Information (OI)** 2009 - 2011

*As a member of Shandong Province OI Team*

- Won the 1st place in the ‘National Olympiad in Information in Province’ (NOIP) in November 2010
- Won the 2nd place in the ‘Shandong Province Team Selection Contest’ (SDTSC) in March 2011
- Won the Silver Medal in ‘Asia Pacific Informatics Olympiad’ (APIO) in May 2011
- Won the Bronze Medal in ‘Chinese Team Selection Contest’ (CTSC) in May 2011
- Won the Silver Medal in ‘National Olympiad in Informatics’ (NOI) in August 2011

**ACM International Collegiate Programming Contest (ACM-ICPC)** 2012 - 2013

*As a member of Fudan ACM-ICPC Team*

- Won the 7th team in ‘Fudan ACM Team Selection Contest’ in July 2012
- Won the 4th place in ‘Fudan ACM individual Selection Contest’ in April 2013