

BOWEN ZHANG

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MCB 407, 1002 West Childs Way

University of Southern California

EDUCATION

University of Southern California

Ph.D. student in Computer Science, Advisor: Prof. Fei Sha.

Sept. 2017 - Present

Tongji University

M.Eng. in Computer Technology, Advisor: Prof. Hanli Wang.

Sept. 2014 - Mar. 2017

Tongji University

B.Eng. in Computer Science and Technology, Advisor: Prof. Hanli Wang.

Maths Elite Class, Minor in Mathematics.

Best Bachelor Thesis of Tongji University.

Sept. 2010 - Jul. 2014

RESEARCH INTERESTS

Computer Vision

Action Recognition, Online Action Detection.

Machine Learning

Deep Learning.

Natural Language Processing

Text Summarization.

RESEARCH EXPERIENCE

Google AI

Manager: Vihan Jain and Eugene Ie

Feb. 2020 -

Student Researcher & Research Intern

- Topic: Visual Grounding.
- Two papers are submitted in the topic of text based video grounding and text based image grounding to Neurips and EMNLP this year, respectively.

Amazon AWS Rekognition

Manager: Yuanjun Xiong, Hao Chen, and Meng Wang

May. 2019 - Dec. 2019

Intern

- Topic: Online video understanding system for streaming videos

University of Southern California

Theoretical & Empirical Data Science Laboratory, Advisor: Prof. Fei Sha

Sept. 2017 - Present

Research Assistant

- Topic: Learning from vision and language

Tencent AI Lab

Manager: Boqing Gong

Jun. 2018 - Aug. 2018

Intern

- Topic: Model-based reinforcement learning

SIAT, Chinese Academy of Sciences

Research Center for Integrate Multimedia, Advisor: Prof. Yu Qiao

Jul. 2015 - Jul. 2017

Visiting Student

- Topic: Real-time video based action recognition system

PUBLICATIONS

- 1 **Bowen Zhang**, Hexiang Hu, Vihan Jain, Eugene Ie, and Fei Sha, Learning to Represent Images and Texts with Denotation Graphs, *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2020
- 2 **Bowen Zhang**, Hexiang Hu, and Fei Sha, Visual Storytelling via Predicting Anchor Word Embeddings in the Stories, *ICCV 2019 Workshop on Closing the Loop Between Vision and Language*, 2019
- 3 Melissa Ailem, **Bowen Zhang**, and Fei Sha, Topic Augmented Generator for Abstractive Summarization, arxiv, 2019 (Short version is on BayLearn 2019)
- 4 Melissa Ailem, **Bowen Zhang**, Aurélien Bellet, Pascal Denis, and Fei Sha, A Probabilistic Model for Joint Learning of Word Embeddings from Texts and Images, *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2018
- 5 **Bowen Zhang**^{*}, Hexiang Hu^{*}, and Fei Sha, Cross-Modal and Hierarchical Modeling of Video and Text, *European Conference on Computer Vision (ECCV)*, 2018
- 6 **Bowen Zhang**, Limin Wang, Zhe Wang, Yu Qiao, and Hanli Wang, Real-Time Action Recognition with Deeply-Transferred Motion Vector CNNs, *IEEE Transactions on Image Processing (TIP)*, 2018
- 7 Zhe Wang, Limin Wang, Yali Wang, **Bowen Zhang**, and Yu Qiao, Weakly supervised patchnets: Describing and aggregating local patches for scene recognition, *IEEE Transactions on Image Processing (TIP)*, 2017
- 8 Yue Zhao, **Bowen Zhang**, Zhirong Wu, Shuo Yang, Lei Zhou, Sijie Yan, Limin Wang, Yuanjun Xiong, Dahua Lin, Yu Qiao, and Xiaoou Tang, CUHK & ETHZ & SIAT Submission to ActivityNet Challenge 2017, *ActivityNet Large Scale Activity Recognition Challenge, CVPR'17 Workshop*, Hawaii, USA, 2017.
- 9 **Bowen Zhang**, Limin Wang, Zhe Wang, Yu Qiao, and Hanli Wang, Real-time Action Recognition with Enhanced Motion Vector CNNs, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR'16)*, Las Vegas, USA, 2016.
- 10 Yuanjun Xiong, Limin Wang, Zhe Wang, **Bowen Zhang**, Hang Song, Wei Li, Dahua Lin, Yu Qiao, Luc Van Gool, and Xiaoou Tang, CUHK & ETHZ & SIAT Submission to ActivityNet Challenge 2016, *ActivityNet Large Scale Activity Recognition Challenge, CVPR'16 Workshop*, Las Vegas, USA, 2016.
- 11 **Bowen Zhang**, and Hanli Wang, Encoding Scale into Fisher Vector for Human Action Recognition, *IEEE Conference on Visual Communications and Image Processing (VCIP'15)*, Singapore, 2015. (**Oral Presentation**)
- 12 Yun Yi, Hanli Wang, **Bowen Zhang**, and Jian Yu, MIC-TJU in MediaEval 2015 Affective Impact of Movies Task, *MediaEval 2015 Workshop*, Wurzen, Germany, 2015.
- 13 **Bowen Zhang**, Yun Yi, Hanli Wang, and Jian Yu, MIC-TJU at MediaEval Violent Scenes Detection (VSD) 2014, *MediaEval 2014 Workshop*, Barcelona, Spain, 2014.

CONTESTS

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|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| The ActivityNet Challenge 2017 on CVPR'17: Untrimmed Classification. <i>Rank</i> 2/37. | <i>Jul. 2017</i> |
| The ActivityNet Challenge 2017 on CVPR'17: Trimmed Classification. <i>Rank</i> 2/27. | <i>Jul. 2017</i> |
| The ActivityNet Challenge 2017 on CVPR'17: Action Localization. <i>Rank</i> 2/15. | <i>Jul. 2017</i> |
| The ActivityNet Challenge 2016 on CVPR'16: Untrimmed Video Classification. <i>Rank</i> 1/25. | <i>Jul. 2016</i> |
| LSUN Challenge 2016 on CVPR'16: Scene Classification. <i>Rank</i> 1 st . | <i>Jul. 2016</i> |
| MediaEval'15 Affective Impact. Violence: <i>Rank</i> : 2 nd ; Valence: <i>Rank</i> : 2 nd ; Arousal: <i>Rank</i> : 1 st . | <i>Sept. 2015</i> |
| MediaEval'14 Affect in Multimedia. Main: <i>Rank</i> : 4 th ; Generalization: <i>Rank</i> : 4 th . | <i>Sept. 2014</i> |

SELECTED HONORS AND AWARDS

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| Shanghai Outstanding Graduates | <i>2017</i> |
| National Graduate Scholarship of China | <i>2016</i> |
| Best Bachelor Thesis of Tongji University (2 recipients in CS department) | <i>2014</i> |

ACADEMIC SERVICE

Reviewer for CVPR 2019, 2020, 2021; AAAI 2020, 2021; ECCV 2020; NAACL 2019; ICCV 2019; WACV 2021; ACCV 2021; BMVC 2020; ICML 2020; IJCV Special Issue on Efficient Visual Recognition; and IEEE Transactions on Image Processing.