JIE LEI

Email: jielei@cs.unc.edu Website: https://www.cs.unc.edu/ \sim jielei/ Phone: 919-564-8651 Github: https://github.com/jayleicn

EDUCATION

University of North Carolina at Chapel Hill

Aug 2017 - Present

Ph.D. in Computer Science, Expected May 2022 Advisors: Tamara L. Berg and Mohit Bansal

University of Electronic Science and Technology of China (UESTC)

Sep 2013 - Jun 2017

B.Eng in Computer Science & Technology, Yingcai Honors College

Advisor: Sinno Jialin Pan (NTU, Singapore)

EXPERIENCE

University of North Carolina at Chapel Hill

 ${\rm Aug}~2017$ - Present

Chapel Hill, NC

Research Assistant with Tamara L. Berg and Mohit Bansal

· Focusing on multimodal video and language understanding.

- · VLEP dataset for video-and-language future event prediction. (EMNLP 2020)
- · TVR and TVC datasets for video-subtitle moment retrieval and captioning. (ECCV 2020)
- · TVQA and TVQA+ for large-scale spatio-temporal video question answering. (EMNLP 2018, ACL 2020)

Microsoft Dynamics 365 AI Research

May 2020 - Aug 2020

Research Intern with Luowei Zhou and Jingjing Liu

Bellevue, WA

· End-to-end vision and language pretraining.

Tencent AI Lab
Research Intern with Liwei Wang, Yelong Shen and Dong Yu

 $\begin{array}{c} \text{May 2019 - Aug 2019} \\ \text{Seattle, WA} \end{array}$

Recurrent transformer for coherent video paragraph captioning. (ACL 2020)

Nanyang Technological University

Oct 2016 - Apr 2017

Research Intern with Sinno Jialin Pan

Singapore

· Transfer learning in deep hash models for fast image retrieval.

University of Manitoba

Jul 2016 - Oct 2016

Research Intern with Yang Wang

Winnipeg, Canada

· Weakly supervised image classification using hierarchical image labels. (CRV 2017)

PAPERS

- [8] **Jie Lei***, Linjie Li*, Luowei Zhou, Zhe Gan, Tamara L. Berg, Mohit Bansal, Jingjing Liu. "Less is More: ClipBERT for Video-and-Language Learning via Sparse Sampling", Under Review 2020. (* denotes equal contribution). Preprint Link
- [7] Zineng Tang, Jie Lei, Mohit Bansal, "Learning from Noisy Instructional Videos.", Under Review 2020.
- [6] **Jie Lei**, Licheng Yu, Tamara L. Berg, Mohit Bansal, "What is More Likely to Happen Next? Video and Language Future Event Prediction", EMNLP 2020. Paper, Dataset
- [5] **Jie Lei**, Licheng Yu, Tamara L. Berg, Mohit Bansal, "TVR: A Large-Scale Dataset for Video-Subtitle Moment Retrieval", ECCV 2020. Paper, Dataset, Retrieval Code, Captioning Code
- [4] **Jie Lei**, Liwei Wang, Yelong Shen, Dong Yu, Tamara L. Berg, Mohit Bansal, "MART: Memory-Augmented Recurrent Transformer for Coherent Video Paragraph Captioning", ACL 2020. **Paper**, **O** Code
- [3] **Jie Lei**, Licheng Yu, Tamara L. Berg, Mohit Bansal, "TVQA+: Spatio-Temporal Grounding for Video Question Answering", ACL 2020. Paper, Dataset, ♠ Code

- [2] **Jie Lei**, Licheng Yu, Mohit Bansal, Tamara L. Berg, "TVQA: Localized, Compositional Video Question Answering", EMNLP 2018 (oral). **Paper**, Dataset, Code
- [1] **Jie Lei**, Zhenyu Guo, Yang Wang. "Weakly Supervised Image Classification with Coarse and Fine Labels." CRV 2017. Paper, Code

PROJECTS

- [1] Jie Lei, "AnimeGAN: Create Anime Face using Generative Adversarial Networks", Github 2017.
- · Implementation of GANs for anime face generation. Data & Code (1K+ stars)
- · Automatic pipeline for large-scale anime face dataset construction from the web.

AWARDS

Adobe Research Fellowship, Adobe, USA.	2021
Outstanding Undergraduate Thesis, UESTC, China	2017
Globalink Research Intern Award (200 undergraduates across China), Mitacs, Canada.	2016
Meritorious Winner, Interdisciplinary Contest In Modeling, COMAP, USA	2016
Scholarship for Academic Excellence (5%), UESTC, China	2015-2016
Futong Scholarship (2%), Futong Group, China	2014

ACADEMIC SERVICE

Journal and Conference Reviewer: TPAMI, IJCV, CVPR 2019-2021, ICCV 2019, ECCV 2020, ACM MM 2020 Interactive Arts, AAAI 2021

Workshop Program Committe: NeurIPS HAMLETS 2020

TECHNICAL & LANGUAGE

Programming Python, JavaScript, HTML/CSS, Matlab, C\C++, Lua **Tools** PyTorch, Linux, Vim, Git, Latex.