

YUNBIN TU

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RESEARCH INTERESTS

- **Vision-and-Language:** video captioning, change captioning, image captioning, multi-modal machine translation.
- **Multimedia content analysis:** multi-modal fusion, text-based information retrieval from video.

EDUCATION

University of Chinese Academy of Sciences Ph.D. in Computer Applied Technology, Advisor: Prof. Li Su and A.P. Liang Li (ICT, CAS)	<i>Sep. 2022 – Present</i> Beijing, China
Kunming University of Science and Technology M.Eng. in Pattern Recognition and Intelligent Systems, Advisor: Prof. Zhengtao Yu	<i>Sep. 2019 – Jun. 2022</i> Kunming, China
Hangzhou Dianzi University B.Eng. in Automation, Advisor: Prof. Chenggang Yan	<i>Sep. 2014 – Jun. 2018</i> Hangzhou, China

INTERN EXPERIENCE

VIPL Research Group, ICT, CAS Research Intern with A.P. Liang Li – Worked on video captioning/retrieval, change captioning.	<i>Nov. 2020 – Aug. 2022</i> Beijing, China
Tsinghua Shenzhen International Graduate School Research Intern with A.P. Xingzheng Wang – Worked on video captioning.	<i>Mar. 2018 – Jun. 2018</i> Shenzhen, China
Prospective Research Lab, ICT, CAS Research Intern with Dr. Xishan Zhang – Worked on video captioning.	<i>Jun. 2016 – Jun. 2017</i> Beijing, China

HONORS & AWARDS

- Merit Student, University of Chinese Academy of Sciences, 2023.
- Excellent Master's Graduation Thesis, Kunming University of Science and Technology, 2022.
- Yunnan Merit Student, Yunnan Province, 2021, 2022.
- National Scholarship for Graduate Students, Ministry of Education of the People's Republic of China, 2021.
- Student Travel Grant, ACM International Conference on Multimedia (ACM MM), 2017.

ACADEMIC SERVICES

- PC member of conferences: AAAI 2023/2024/2025, ACL 2023/2024, EMNLP 2023/2024, ACM MM 2023/2024.
- Reviewer of journals: IEEE TIP (IF:10.8), IEEE TCSVT (IF:8.3), IEEE TETCI (IF:5.3), Artificial Intelligence Review (IF:10.7), Neurocomputing (IF:5.5).

PUBLICATIONS

- Citations = 636; h-index = 10; i10-index = 10; as of July 3, 2024.
- Check my google scholar profile for the latest list of publications.

- [1] **Yunbin Tu**, Liang Li, Li Su, Chenggang Yan, Qingming Huang. Distractors-Immune Representation Learning with Cross-modal Contrastive Regularization for Change Captioning, **ECCV**, 2024.
- [2] **Yunbin Tu**, Liang Li, Li Su, Zheng-Jun Zha, Chenggang Yan, Qingming Huang. Context-aware Difference Distilling for Multi-change Captioning, **ACL** (main conference, long paper), 2024.

- [3] Shengbin Yue, **Yunbin Tu**, Liang Li, Shengxiang Gao, Zhengtao Yu. Multi-grained Representation Aggregating Transformer with Gating Cycle for Change Captioning, *ACM Transactions on Multimedia Computing Communications and Applications (TOMM)*, 2024 (Early Access, IF:5.2).
- [4] **Yunbin Tu**, Liang Li, Li Su, Zheng-Jun Zha, Qingming Huang. SMART: Syntax-calibrated Multi-Aspect Relation Transformer for Change Captioning, *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2024 (IF:20.8).
- [5] **Yunbin Tu**, Liang Li, Li Su, Zheng-Jun Zha, Chenggang Yan, Qingming Huang. Self-supervised Cross-view Representation Reconstruction for Change Captioning, *ICCV*, 2023.
- [6] **Yunbin Tu**, Liang Li, Li Su, Junping Du, Ke Lu, Qingming Huang, Viewpoint-Adaptive Representation Disentanglement Network for Change Captioning, *IEEE Transactions on Image Processing (TIP)*, 2023 (IF:10.8).
- [7] **Yunbin Tu**, Liang Li, Li Su, Ke Lu, Qingming Huang, Neighborhood Contrastive Transformer for Change Captioning, *IEEE Transactions on Multimedia (TMM)*, 2023 (IF:8.4).
- [8] **Yunbin Tu**, Chang Zhou, Junjun Guo, Huafeng Li, Shengxiang Gao, Zhengtao Yu, Relation-aware attention for video captioning via graph learning, *Pattern Recognition (PR)*, 2023 (IF:7.5).
- [9] Shengbin Yue, **Yunbin Tu**, Liang Li, Ying Yang, Shengxiang Gao, Zhengtao Yu, I3N: Intra- and Inter-representation Interaction Network for Change Captioning, *IEEE Transactions on Multimedia (TMM)*, 2023 (IF:8.4).
- [10] **Yunbin Tu**, Liang Li, Li Su, Shengxiang Gao, Chenggang Yan, Zhengjun Zha, Zhengtao Yu, Qingming Huang, I²Transformer: Intra- and Inter-relation Embedding Transformer for TV Show Captioning, *IEEE Transactions on Image Processing (TIP)*, 2022 (IF:10.8).
- [11] Liang Li, Xingyu Gao, Jincan Deng, **Yunbin Tu**, Zhengjun Zha, Qingming Huang, Long Short-Term Relation Transformer with Global Gating for Video Captioning, *IEEE Transactions on Image Processing (TIP)*, 2022 (IF:10.8).
- [12] Gaoxiang Cong, Liang Li, Zhenhuan Liu, **Yunbin Tu**, Weijun Qin, Shenyuan Zhang, Chengang Yan, Wenyu Wang, Bin Jiang: LS-GAN: Iterative Language-based Image Manipulation via Long and Short Term Consistency Reasoning, *ACM MM*, 2022.
- [13] **Yunbin Tu**, Chang Zhou, Junjun Guo, Shengxiang Gao, Zhengtao Yu, Enhancing the Alignment between Target Words and Corresponding Frames for Video Captioning, *Pattern Recognition (PR)*, 2021 (IF:7.5).
- [14] **Yunbin Tu**, Liang Li, Tingting Yao, Jiedong Lou, Shengxiang Gao, Zhengtao Yu, Chenggang Yan, Semantic Relation-aware Difference Representation Learning for Change Captioning, *Findings of ACL (Long)*, 2021.
- [15] **Yunbin Tu**, Liang Li, Chenggang Yan, Shengxiang Gao, Zhengtao Yu, R³Net: Relation-embedded Representation Reconstruction Network for Change Captioning, *EMNLP (Long)*, 2021.
- [16] Chengang Yan, **Yunbin Tu**, Xingzheng Wang, Yongbing Zhang, Xinhong Hao, Yongdong Zhang, Qionghai Dai, STAT: spatial-temporal attention mechanism for video captioning, *IEEE Transactions on Multimedia (TMM)*, 2019 (IF:8.4).
- [17] **Yunbin Tu**, Xishan Zhang, Bingtao Liu, Chenggang Yan, Video Description with Spatial-Temporal Attention, *ACM MM*, 2017.