

# YUNBIN TU

📞 (+86) 15010751895 | ✉️ tuyunbin22@mails.ucas.ac.cn | 🏠 <https://tuyunbin.github.io/>

## 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

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

## INTERN EXPERIENCE

<b>VIPL Research Group, ICT, CAS</b> Research Intern with A.P. Liang Li – Worked on video captioning/retrieval, change captioning.	<i>Nov. 2020 – Aug. 2022</i> Beijing, China
<b>Tsinghua Shenzhen International Graduate School</b> Research Intern with A.P. Xingzheng Wang – Worked on video captioning.	<i>Mar. 2018 – Jun. 2018</i> Shenzhen, China
<b>Prospective Research Lab, ICT, CAS</b> 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, ACL 2023/2024, EMNLP 2023, ACM MM 2023/2024.
- Reviewer of journals: IEEE TIP (IF:10.6), IEEE TCSVT (IF:8.4), IEEE TETCI (IF:5.3), Artificial Intelligence Review (IF:12.0), Neurocomputing (IF:6.0).

## PUBLICATIONS

- Citations = 605; h-index = 9; i10-index = 8; as of May 18, 2024.
- Check my google scholar profile for the latest list of publications.

- [1] **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 .
- [2] Shengbin Yue, **Yunbin Tu**, Liang Li, Shengxiang Gao, Zhengtao Yu. Multi-grained Representation Aggregating Transformer with Gating Cycle for Change Captioning, **TOMM**, 2024 (Early Access, IF:5.1).
- [3] **Yunbin Tu**, Liang Li, Li Su, Zheng-Jun Zha, Qingming Huang. SMART: Syntax-calibrated Multi-Aspect Relation Transformer for Change Captioning, **TPAMI**, 2024 (Early Access, IF:23.6).

- [4] **Yunbin Tu**, Liang Li, Li Su, Zheng-Jun Zha, Chenggang Yan, Qingming Huang. Self-supervised Cross-view Representation Reconstruction for Change Captioning, **ICCV**, 2023.
- [5] **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:10.6).
- [6] **Yunbin Tu**, Liang Li, Li Su, Ke Lu, Qingming Huang, Neighborhood Contrastive Transformer for Change Captioning, IEEE Transactions on Multimedia (**TMM**), 2023 (IF:7.3).
- [7] **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:8.0).
- [8] 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:7.3).
- [9] **Yunbin Tu**, Liang Li, Li Su, Shengxiang Gao, Chenggang Yan, Zhengjun Zha, Zhengtao Yu, Qingming Huang, I<sup>2</sup>Transformer: Intra- and Inter-relation Embedding Transformer for TV Show Captioning, IEEE Transactions on Image Processing (**TIP**), 2022 (IF:10.6).
- [10] 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:10.6).
- [11] 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.
- [12] **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:8.0).
- [13] **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.
- [14] **Yunbin Tu**, Liang Li, Chenggang Yan, Shengxiang Gao, Zhengtao Yu, R<sup>3</sup>Net: Relation-embedded Representation Reconstruction Network for Change Captioning, **EMNLP** (Long), 2021.
- [15] 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:7.3).
- [16] **Yunbin Tu**, Xishan Zhang, Bingtao Liu, Chenggang Yan, Video Description with Spatial-Temporal Attention, **ACM MM**, 2017.