

# Yapeng TIAN

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**CONTACT INFORMATION**      The Department of Computer Science,  
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**RESEARCH INTERESTS**      • Vision and Sound: audio-visual video understanding  
• Low-Level Vision: image/video restoration

**EDUCATION**      **University of Rochester**, Rochester, USA      Sep. 2017 – Exp. 2022  
• *PhD student* in The Department of Computer Science  
• Advisor: *Prof. Chenliang Xu*  
**Tsinghua University**, Beijing, China      Sep. 2014 – July 2017  
• *M.E.* in The Department of Electronic Engineering  
• GPA: 90.55/100 (Rank: 3/52)  
• Outstanding Graduate of Tsinghua University Award (Top 1%)  
**Xidian University**, Xi'an, China      Aug. 2009 – July 2013  
• *B.E.* in Intelligence Science and Technology (School of Electronic Engineering)

**WORK EXPERIENCE**      **Adobe Research**, Seattle, USA      May 2019 – Present  
• *Research Intern* in the Creative Intelligence Lab  
• Mentor: *Dr. Dingzeyu Li*

**RESEARCH EXPERIENCE**      **CS, University of Rochester**      Aug. 2018 – Mar. 2019  
• *Research Assistant* with *Prof. Chenliang Xu*  
Project: Audio-visual interpretable and controllable video captioning  
**CS, University of Rochester**      Sep. 2018 – Mar. 2019  
• *Research Assistant* with *Prof. Chenliang Xu*  
Project: Temporal alignment for video restoration  
**CS, University of Rochester**      Sep. 2017 – Mar. 2018  
• *Research Assistant* with *Prof. Chenliang Xu*  
Project: Audio-visual event localization in unconstrained videos (ECCV 2018)  
**EE, Tsinghua University**      Mar. 2015 – Aug. 2017  
• *Research Assistant* with *Prof. Wenming Yang*  
Project: Single image super-resolution  
**SIAT, Chinese Academy of Sciences**      Nov. 2016 – May 2017  
• *Visiting Student* with *Prof. Yu Qiao*  
Project: Deep learning for low-level vision

**JOURNAL PUBLICATIONS**

- Wenming Yang, Xuechen Zhang, **Yapeng Tian**, Wei Wang, Jing-Hao Xue, Qingmin Liao, “Deep Learning for Single Image Super-Resolution: A Brief Review,” IEEE Trans. Multimedia (TMM), 2019.
- Wenming Yang, **Yapeng Tian**, Fei Zhou\*, Qingmin Liao, Hai Chen and Chenglin Zheng, “Consistent Coding Scheme for Single-Image Super-Resolution Via Independent Dictionaries,” IEEE Trans. Multimedia (TMM), vol. 18, no. 3, pp. 313-325, Mar. 2016. (as first student author and Dr. Wenming Yang was my master advisor)

#### CONFERENCE PUBLICATIONS

- **Yapeng Tian**, Chenxiao Guan, Goodman Justin, Marc Moore, and Chenliang Xu, “Audio-Visual Interpretable and Controllable Video Captioning”, CVPR Sight and Sound Workshop, 2019.
- **Yapeng Tian**, Jing Shi, Bochen Li, Zhiyao Duan, and Chenliang Xu, “Audio-Visual Event Localization in the Wild”, CVPR Sight and Sound Workshop, 2019. (**Oral**)
- **Yapeng Tian**, Jing Shi, Bochen Li, Zhiyao Duan, and Chenliang Xu, “Audio-Visual Event Localization in Unconstrained Videos”, ECCV, 2018.
- Yulun Zhang, **Yapeng Tian**, Yu Kong, Bineng Zhong, Yun Fu, “Residual Dense Network for Image Super-Resolution,” CVPR, 2018. (**Spotlight**)
- Radu Timofte, Eirikur Agustsson, Luc Van Gool, ..., **Yapeng Tian**, ..., “NTIRE 2017 Challenge on Single Image Super-Resolution: Methods and Results,” Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2017.
- Xuesen Shang, Wenming Yang, Shuifa Sun, **Yapeng Tian**, Hai Chen, Kaiquan Chen, “Adaptive Anchor-Point Selection for Single Image Super-Resolution,” VCIP, 2017.
- **Yapeng Tian**, Fei Zhou, Wenming Yang\*, Xuesen Shang and Qingmin Liao, “Anchored Neighborhood Regression based Single Image Super-Resolution from Self-Examples,” ICIP, 2016.
- Wenming Yang, **Yapeng Tian**, Fei Zhou, Tingrong Yuan, Xuesen Shang and Qingmin Liao, “Single-Image Super-Resolution Using Clustering-Based Global Regression and Propagation Filtering,” ACPR, 2015. (**Oral**)

#### TECHNICAL REPORTS

- **Yapeng Tian**, Yulun Zhang, Yun Fu, and Chenliang Xu, “TDAN: Temporally Deformable Alignment Network for Video Super-Resolution”, arXiv:1812.02898. (Submitted to ICCV 2019)
- **Yapeng Tian**, Chenxiao Guan, Goodman Justin, Marc Moore, and Chenliang Xu, “An Attempt towards Interpretable Audio-Visual Video Captioning”, arXiv:1812.02872. (Submitted to ICCV 2019)
- Yulun Zhang, **Yapeng Tian**, Yu Kong, Bineng Zhong, Yun Fu, “Residual Dense Network for Image Restoration,” arXiv:1812.10477. (Submitted to IEEE Transactions on Pattern Analysis and Machine Intelligence)

#### TEACHING EXPERIENCE

##### Teaching Assistant

- Spring 2019 CSC249/449: Machine Vision, University of Rochester

	<ul style="list-style-type: none"> <li>• Fall 2018 CSC577: Advanced Topics in Computer Vision, University of Rochester</li> <li>• Spring 2018 CSC249/449: Machine Vision, University of Rochester</li> <li>• Fall 2015: Digital image processing and its applications, Tsinghua University</li> <li>• Spring 2016: Practice of digital image processing, Tsinghua University</li> </ul>	
HONORS AND AWARDS	<ul style="list-style-type: none"> <li>• Amazon Graduate Student Symposium, Seattle, USA (invited)</li> <li>• Outstanding Graduate of Tsinghua University (Top 1%)</li> <li>• Outstanding Master Thesis Award, Tsinghua University</li> <li>• National Scholarship (Top 2%), Tsinghua University, China</li> <li>• Second-class Scholarship, Tsinghua University, China</li> </ul>	2019 2017 2017 2016 2015
PROFESSIONAL ACTIVITIES	<p><b>Reviewers</b></p> <ul style="list-style-type: none"> <li>• Conferences: CVPR 2019, ICCV 2019</li> <li>• Journals: IEEE TMM, IEEE TCSVT, IEEE Access, Signal Processing: Image Communication, Neurocomputing</li> </ul> <p><b>Attended Conferences and Symposiums</b></p> <ul style="list-style-type: none"> <li>• Amazon Graduate Student Symposium, Seattle, USA</li> <li>• ECCV, Munich, Germany</li> <li>• IEEE International Conference on Image Processing, Phoenix, America</li> <li>• Asian Conference on Pattern Recognition, Kuala Lumpur, Malaysia</li> </ul> <p><b>Membership</b></p> <ul style="list-style-type: none"> <li>• IEEE Student Member</li> </ul>	Mar. 2019 Sep. 2018 Sep. 2016 Nov. 2015
UNIVERSITY SERVICES	<ul style="list-style-type: none"> <li>• PhD Admission Committee (CS, University of Rochester)</li> <li>• ASE Conference Travel Funding Grant Reviewer</li> </ul>	2018-2019 2018
STUDENT ADVISING	<p><b>MS Students</b></p> <ul style="list-style-type: none"> <li>• Yujian Wu (DS, University of Rochester) Project: Emotion-aware talking face generation Current Position: Software engineer in Schlumberger, Boston, USA</li> <li>• Shurui Zhang (Optics, University of Rochester) Project: Video super-resolution Current Position: Computer vision software engineer in CVTE, China</li> </ul> <p><b>Undergraduates</b></p> <ul style="list-style-type: none"> <li>• Haozhang Deng (DS, University of Rochester) Project: Generalized audio-visual event localization dataset annotation</li> <li>• Chenxiao Guan (Xerox Fellow, CE, University of Rochester) Project: Audio-visual video captioning Next: CMU master program</li> </ul>	Fall 2018 Spring 2018 Spring 2019 Summer 2018

- Justin Goodman (REU Student from University of Maryland) Summer 2018  
Project: Audio-visual event localization and video captioning data collection
- Marc Moore (REU Student from Mississippi State University) Summer 2018  
Project: Audio-visual event localization and video captioning data collection

## SKILLS

- Languages: Mandarin (native), English.
- Programming: Python, Pytorch, Keras, MATLAB, C/C++, Opencv, L<sup>A</sup>T<sub>E</sub>X.