Yibing Song

Applicant for an area chair of CVPR 2022

Biography

Email: yibingsong.cv@gmail.com

Homepage: https://ybsong00.github.io

Scholar: https://scholar.google.com/citations?pli=1&user=oRhJHmIAAAAJ

Education Background

Doctor of Philosophy Aug 2014 - Apr 2018

Computer Science, City University of Hong Kong Supervisor: Prof. Qingxiong Yang

CityU is ranked **Top 50** in QS World University Ranking 2020.

Master of Philosophy Sep 2012 - Aug 2014

Computer Science, City University of Hong Kong Supervisor: Prof. Qingxiong Yang

Bachelor of Engineering Sep 2007 - July 2011

Electrical and Information Engineering, University of Science and Technology of China

Work Experience

Senior Research Scientist Apr 2018 - present

Tencent AI Lab, Shenzhen, China Director: Dr. Jue Wang Visiting Student Apr 2016 - March 2017

University of California at Merced Supervisor: Prof. Ming-Hsuan Yang

Research Intern

July 2015 - Nov 2015

Adobe Research, San Jose, U.S Supervisor: Dr. Zhe Lin

Research Expertise

Motion and tracking, self-supervised visual representation learning, image and video synthesis

Academic Service and Awards

Winner of 2021 ActivityNet Kinectics-700 Self-supervised Challenge

Senior Program Committee: IJCAI 2021

Outstanding Reviewer Award: CVPR 2018, CVPR 2019, CVPR 2020

Top reviewer Award: NeurIPS 2019

Regular reviewer: CVPR, ICCV, ECCV, PAMI, IJCV, NeurIPS, ICML, and ICLR

Publication List

⊠ indicates I am the corresponding author. ¹ indicates co-first author.

Conference papers: (12 CVPR, 1 ICCV, 5 ECCV, 1 NeurIPS, 1 ICLR, 2 IJCAI)

- Tian Pan¹, Yibing Song¹, Tianyu Yang, Wenhao Jiang, and Wei Liu, VideoMoCo: Contrastive Video Representation Learning with Temporally Adversarial Examples,
 - IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- Chongjian Ge, Yibing Song ⋈, Yuying Ge, Han Yang, Wei Liu, and Ping Luo, Disentangled Cycle Consistency for Highly-realistic Virtual Try-On, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- Hongyu Liu, Ziyu Wan, Wei Huang, Yibing Song ⋈, Xintong Han, Jing Liao, Bin Jiang, and Wei Liu,
 DeFLOCNet: Deep Image Editing via Flevible Low-level Controls
 - DeFLOCNet: Deep Image Editing via Flexible Low-level Controls, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- 4. Yuying Ge, Yibing Song ⋈, Ruimao Zhang, Chongjian Ge, Wei Liu, and Ping Luo, Parser-Free Virtual Try-on via Distilling Appearance Flows, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- Hongyu Liu, Ziyu Wan, Wei Huang, Yibing Song, Xintong Han, and Jing Liao,
 PD-GAN: Probabilistic Diverse GAN for Image Inpainting,
 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- 6. Shuai Jia, Yibing Song, Chao Ma, and Xiaokang Yang, IoU Attack: Towards Temporally Coherent Black-Box Adversarial Attack for Visual Object Tracking, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- 7. Jie An, Siyu Huang, Yibing Song, Dejing Dou, Wei Liu, and Jiebo Luo, ArtFlow: Unbiased Image Style Transfer via Reversible Neural Flows, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021
- Gege Qi, Lijun Gong, Yibing Song ⋈, Kai Ma, and Yefeng Zheng, Stabilized Medical Image Attacks, International Conference on Learning Representations (ICLR) 2021 (Spotlight)
- 9. Hongyu Liu, Bin Jiang, **Yibing Song** ⋈, Wei Huang, and Chao Yang, Rethinking Image Inpainting via a Mutual Encoder-Decoder with Feature Equalizations, European Conference on Computer Vision (**ECCV**) 2020 (Oral)

- Shuai Jia, Chao Ma, Yibing Song, and Xiaokang Yang, Robust Tracking against Adversarial Attacks, European Conference on Computer Vision (ECCV) 2020
- 11. Yinglong Wang, Yibing Song ⋈, Chao Ma, and Bing Zeng, Rethinking Image Deraining via Rain Streaks and Vapors, European Conference on Computer Vision (ECCV) 2020
- 12. Ning Wang, **Yibing Song** ⋈, Chao Ma, Wengang Zhou, Wei Liu, and Houqiang Li, Unsupervised Deep Tracking,
 IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2019
- 13. Fanzi Wu, Linchao Bao, Yajing Chen, Yonggen Ling, **Yibing Song**, Songnan Li, King Ngan, and Wei Liu,
 - MVF-Net: Multi-View 3D Face Morphable Model Regression, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2019
- 14. Shi Pu, Yibing Song, Chao Ma, Honggang Zhang, and Ming-Hsuan Yang, Deep Attentive Tracking via Reciprocative Learning, Neural Information Processing Systems (NeurIPS) 2018
- Jianbo Jiao, Ying Cao, Yibing Song, and Rynson Lau Look Deeper into Depth: Monocular Depth Estimation with Semantic Booster and Attention-Driven Loss,
 - European Conference on Computer Vision (ECCV) 2018
- 16. Jiawei Zhang, Jinshan Pan, Jimmy Ren, Yibing Song, Linchao Bao, Rynson Lau, and Ming-Hsuan Yang,
 Dynamic Scene Deblurring using Spatially Variant Recurrent Neural Networks,
 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2018
 (Spotlight)
- 17. Xin Yang, Ke Xu, **Yibing Song** ⋈, Qiang Zhang, Xiaopeng Wei, and Rynson Lau Image Correction via Deep Reciprocating HDR Transformation, IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2018
- 18. **Yibing Song**, Chao Ma, Xiaohe Wu, Lijun Gong, Linchao Bao, Chunhua Shen, Rynson Lau, and Ming-Hsuan Yang,
 - VITAL: Visual Tracking via Adversarial Learning,
 - IEEE/CVF Conference on Computer Vision and Pattern Recognition (\mathbf{CVPR}) 2018 (Spotlight)
- Yibing Song, Chao Ma, Lijun Gong, Jiawei Zhang, Rynson Lau, and Ming-Hsuan Yang, CREST: Convolutional Residual Learning for Visual Tracking,
 IEEE International Conference on Computer Vision (ICCV) 2017

- 20. Yibing Song, Jiawei Zhang, Linchao Bao, and Qingxiong Yang, Fast Preprocessing for Robust Face Sketch Synthesis, International Joint Conference on Artificial Intelligence (IJCAI) 2017
- 21. Yibing Song, Jiawei Zhang, Shengfeng He, Linchao Bao, and Qingxiong Yang, Learning to Hallucinate Face Images via Component Generation and Enhancement, International Joint Conference on Artificial Intelligence (IJCAI) 2017
- 22. Yibing Song, Linchao Bao, Qingxiong Yang, and Ming-Hsuan Yang, Real-Time Exemplar-Based Face Sketch Synthesis, European Conference on Computer Vision (ECCV) 2014
- 23. Yibing Song, Linchao Bao, and Qingxiong Yang, Real-Time Video Decolorization Using Bilateral Filtering, IEEE Winter Conference on Applications of Computer Vision (WACV) 2014
- 24. Yibing Song, Linchao Bao, Xiaobin Xu, and Qingxiong Yang, Decolorization: Is rgb2gray () out? ACM SIGGRAPH ASIA Technical Briefs 2013
- 25. Linchao Bao, Yibing Song, Qingxiong Yang, and Narendra Ahuja, An edge-preserving filtering framework for visibility restoration International Conference on Pattern Recognition (ICPR) 2012
- 26. Wengang Zhou, Yijuan Lu, Houqiang Li, Yibing Song, and Qi Tian, Spatial coding for large scale partial-duplicate web image search, ACM International Conference on Multimedia (MM) 2010

Journal papers: (2 IJCV, 6 IEEE TIP)

- Ning Wang, Wengang Zhou, Yibing Song, Chao Ma, Wei Liu, and Houqiang Li, Unsupervised Deep Representation Learning for Real-Time Tracking, International Journal of Computer Vision (IJCV) 2020
- Ning Wang, Wengang Zhou, Yibing Song, Chao Ma, and Houqiang Li, Real-Time Correlation Tracking via Joint Model Compression and Transfer, IEEE Transactions on Image Processing (TIP) 2020
- Yajing Chen, Fanzi Wu, Zeyu Wang, Yibing Song, Yonggen Ling, and Linchao Bao, Self-supervised Learning of Detailed 3D Face Reconstruction, IEEE Transactions on Image Processing (TIP) 2020
- 4. Shi Pu, **Yibing Song**, Chao Ma, Honggang Zhang, and Ming-Hsuan Yang, Learning Recurrent Memory Activation Networks for Visual Tracking, IEEE Transactions on Image Processing (**TIP**) 2020

 Fei Zhao, Ting Zhang, Yibing Song, Ming Tang, Xiaobo Wang, and Jinqiao Wang, Siamese Regression Tracking with Reinforced Template Updating, IEEE Transactions on Image Processing (TIP) 2020

 Yibing Song, Jiawei Zhang, Lijun Gong, Shengfeng He, Linchao Bao, Jinshan Pan, Qingxiong Yang, and Ming-Hsuan Yang,

Joint Face Hallucination and Deblurring via Structure Generation and Detail Enhancement,

International Journal of Computer Vision (IJCV) 2019

7. Wenxi Liu, **Yibing Song**, Dengsheng Chen, Shengfeng He, Yuanlong Yu, Tao Yan, Gerhard Hancke, and Rynson Lau,

Deformable Object Tracking with Gated Fusion,

IEEE Transactions on Image Processing (TIP) 2019

 Yibing Song, Linchao Bao, Shengfeng He, Qingxiong Yang, and Ming-Hsuan Yang, Stylizing Face Images via Multiple Exemplars, Computer Vision and Image Understanding (CVIU) 2017

Linchao Bao, Yibing Song, Qingxiong Yang, Hao Yuan, and Gang Wang,
 Tree filtering: Efficient structure-preserving smoothing with a minimum spanning tree
 IEEE Transactions on Image Processing (TIP) 2013