Chuanxia Zheng

Curriculum Vitae

Institute of Media Innovation
Nanyang Technological University

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Education

2017–2021 Nanyang Technological University.

Ph.D. in Computer Science, SCSE Advisor: Tat-Jen Cham and Jianfei Cai

2014–2017 Beihang University.

MA.E. in Automation Science

Thesis: Context-based Indoor Scene Understanding for Mobile Robot

Advisor: Jianhua Wang and Weihai Chen

2010-2014 Beijing Jiaotong University.

B.E. in Electronic and Information Engineering Ranked 2nd out of 100, Class of 2014

Employment

2021 Monash University.

Research assistant at Monash Research Institute of Science and Technology Work on image geneation and 3D generation

2017 Huawei Research.

Research assistant at Noah's Ark Lab Work on face recognition and generation

2016 Tencent Research.

Research Intern at Fundamental Research Center of Tencent Work on news recommendation

Publications

- [1] Chuanxia Zheng, Duy-Son Dao, Guoxian Song, Tat-Jen Cham, and Jianfei Cai. Visiting the invisible: layer-by-layer completed scene decomposition. *International Journal of Computer Vision* (*IJCV*), 2021.
- [2] Yujun Cai, Yiwei Wang, Yiheng Zhu, Tat-Jen Cham, Jianfei Cai, Junsong Yuan, Jun Liu, **Chuanxia Zheng**, Sijie Yan, Henghui Ding, Xiaohui Shen, Ding Liu, and Nadia Magnenat Thalmann. A unified 3d human motion synthesis model via conditional variational auto-encoder. In *Proceedings of the International Conference on Computer Vision*(ICCV), 2021.
- [3] Chuanxia Zheng, Tat-Jen Cham, and Jianfei Cai. Pluralistic free-form image completion. International Journal of Computer Vision (IJCV), 2021.
- [4] Guoxian Song, Linjie Luo, Jing Liu, Wan-Chun Ma, Chunpong Lai, **Chuanxia Zheng**, and Tat-Jen Cham. Agilegan: stylizing portraits by inversion-consistent transfer learning. *ACM Transactions on Graphics* (*TOG*), 40(4):1–13, 2021.
- [5] Chuanxia Zheng, Tat-Jen Cham, and Jianfei Cai. The spatially-correlative loss for various image translation tasks. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition(CVPR)*, pages 16407–16417, 2021.
- [6] Chuanxia Zheng, Tat-Jen Cham, and Jianfei Cai. Pluralistic image completion. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), pages 1438–1447, 2019.
- [7] Tianyi Zhang, Jingyi Yang, Chuanxia Zheng, Guosheng Lin, Jianfei Cai, and Alex C Kot.

- Task-in-all domain adaptation for semantic segmentation. In 2019 IEEE Visual Communications and Image Processing (VCIP), pages 1–4. IEEE, 2019.
- [8] Chuanxia Zheng, Tat-Jen Cham, and Jianfei Cai. T2net: Synthetic-to-realistic translation for solving single-image depth estimation tasks. In Proceedings of the European Conference on Computer Vision (ECCV), pages 767–783, 2018.
- [9] Chuanxia Zheng, Jianhua Wang, Weihai Chen, and Xingming Wu. Multi-class indoor semantic segmentation with deep structured model. *The Visual Computer (TVCJ)*, 34(5):735–747, 2018.
- [10] Jianhua Wang, Chuanxia Zheng, Weihai Chen, and Xingming Wu. Learning aggregated features and optimizing model for semantic labeling. The Visual Computer (TVCJ), 33(12):1587–1600, 2017.
- [11] **Chuanxia Zheng**, Jianhua Wang, Weihai Chen, and Xingming Wu. Semantic segmentation based on aggregated features and contextual information. In 2016 IEEE International Conference on Robotics and Biomimetics (ROBIO), pages 862–867. IEEE, 2016.
- [12] Jianhua Wang, **Chuanxia Zheng**, Weihai Chen, and Xingming Wu. Learning contextual information for indoor semantic segmentation. In 2016 IEEE 11th Conference on Industrial Electronics and Applications (ICIEA), pages 1639–1644. IEEE, 2016.

Preprints

[13] **Chuanxia Zheng**, Tat-Jen Cham, and Jianfei Cai. Tfill: Image completion via a transformer-based architecture. *arXiv*.

Academic Services

Journal Reviewer

- TPAMI IEEE Transactions on Pattern Analysis and Machine Intelligence
 - IJCV International Journal of Computer Vision Special Issue on Generative Adversarial Networks for Computer Vision
 - TIP IEEE Transactions on Image Processing
 - TMM IEEE Transactions on Multimedia (Outstanding Reviewer Award, 2021)
- TCSVT IEEE Transactions on Circuits and Systems for Video Technology
 - CVIU Computer Vision and Image Understanding
 - TVCJ The Visual Computer

Conference Reviewer

- 2021 CVPR, ICCV, ICLR, ACM MM
- 2020 CVPR, ECCV
- 2019 ICCV

■ Awards & Honors

- 2021 NTU Outstanding PhD Thesis Award (Nomination, waiting for defence)
- 2021 TMM Outstanding Reviewer Award
- 2017 NTU Research Scholarship
- 2015,2016 First Prize Scholarship for Excellent Student
 - 2014 Outstanding Graduate of Beijing
 - 2013 National Second Prize of the National Electronic Design Contest (Best one in Beijing)
 - 2012 Hanergy Special Scholarship (**Top 1%**)
 - 2011 Siemens Special Scholarship (**Top 1%**)

Talks

- 2019 Pluralistic Image Completion, Institute of Media Innovation, NTU.
- 2018 Depth Estimation from Single 2D Image, Institute of Media Innovation, NTU.

Teaching

2018–2020 Teaching Assistant, Advanced Digital Image Processing, NTU.

 $2018-2020 \quad \textbf{Teaching Assistant}, \ \textit{Human-Computer Interaction}, \ \textit{NTU}.$