

Yichao ZHOU's Résumé

PERSONAL INFORMATION

Website: <https://yichaozhou.com/>

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EDUCATION

- **University of California, Berkeley, CA, USA** Aug. 2015 – Dec. 2020
Department of Electrical Engineering & Computer Sciences (EECS)
Ph.D. in Computer Science
- **Tsinghua University, Beijing, China** Sep. 2011 – June. 2015
Institute for Interdisciplinary Information Science (**Yao Class**)
Four-year Bachelor of Engineering Program of Computer Science and Technology

WORKING EXPERIENCE

- **Apple Inc., CA, USA** Feb. 2021 – Present
 - Research Scientist in *Vladlen Koltun's* Team: Image Synthesis, Single-View 3D Reconstruction
 - 3D Vision Engineer in ARKit Team: Vision Pro Travel Mode
- **University of California, Berkeley, CA, USA** Aug. 2015 – Dec. 2020
 - Research Assistant in Berkeley Artificial Intelligence Research Lab, advised by *Yi Ma*
 - Interests: 3D Vision, Computer Graphics, Machine Learning
- **ByteDance Research Palo Alto, CA, USA** May. 2019 – Aug. 2019
 - Research Intern in ByteDance AR Group, advised by *Yi Ma* and *Linjie Luo*
- **Adobe Research, CA, USA** May. 2018 – Aug. 2018
 - Research Intern in Emerging Graphics Group, advised by *Qi Sun*, *Zhili Chen*, and *Li-Yi Wei*
- **Snapchat Inc., CA, USA** Jun. 2017 – Nov. 2017
 - Research Intern in Multimedia Group, advised by *Wei Chu* and *Xin Chen*
- **Bellus 3D Inc., CA, USA** Jun. 2016 – Aug. 2016
 - Intern in 3D Face Modeling and Reconstruction, advised by *James Davis* and *Jin Liu*
- **Tsinghua University, Beijing, China** Dec. 2013 – June. 2015
 - Research Assistant in MLCB Group, advised by *Jiayang Zeng*
- **Microsoft Research Asia, Beijing, China** Aug. 2013 – Nov. 2013
 - Research Intern in Natural Language Processing and Data Mining Group, advised by *Jianwen Zhang*

AWARDS

- **Silver medal** in the 23rd International Olympiad in Informatics (**IOI 2011**) Jul. 2011
- **Golden medal** in Chinese National Olympiad in Informatics (**NOI 2010**) Jul. 2010
- **Silver medal** in ACM-ICPC Asia Beijing Region Contest Nov. 2011
- **Champion** in Tsinghua Artificial Intelligence Design Contest Mar. 2012
- **Runner-up** in Tsinghua Software Engineering Contest May. 2012
- **Outstanding Student Scholarship** in Technology and Innovation, Tsinghua University Jun. 2012
- **First-Class Freshman Scholarship**, Tsinghua University Jun. 2012

PUBLICATIONS

1. Shichen Liu, Yunxuan Cai, Haiwei Chen, **Yichao Zhou**, Yajie Zhao “Rapid Face Asset Acquisition with Recurrent Feature Alignment”. *SIGGRAPH Asia 2022*.
2. Shichen Liu, **Yichao Zhou**, Yajie Zhao, Randall Hill. “VaPiD: A Rapid Vanishing Point Detector via Learned Optimizers”. *ICCV 2021*.
3. **Yichao Zhou**, Shichen Liu, Yi Ma. “NeRD: Neural 3D Reflection Symmetry Detector”. *CVPR 2021*.
4. **Yichao Zhou**, Jingwei Huang, Xili Dai, Linjie Luo, Zhili Chen, Yi Ma. “HoliCity: A City-Scale Data Platform for Learning Holistic 3D Structures”. Technical Report. <https://holicity.io/>.
5. **Yichao Zhou**, Shichen Liu, Yi Ma. “Learning to Detect 3D Reflection Symmetry for Single-View Reconstruction”. Technical Report. arXiv:2006.10042 [cs.CV].
6. Jingwei Huang, **Yichao Zhou**, Leonidas Guibas. “ManifoldPlus: A Robust and Scalable Watertight Manifold Surface Generation Method for Triangle Soups”. Technical Report. arXiv:2005.11621 [cs.GR].
7. Chaobing Song, Zengyuan Zhou, **Yichao Zhou**, Yong Jiang, Yi Ma. “Optimistic Dual Extrapolation for Non-monotone Variational Inequality”. *NeurIPS 2020*.
8. **Yichao Zhou**, Haozhi Qi, Jingwei Huang, Yi Ma. “NeurVPS: Neural Vanishing Point Scanning via Conic Convolution”. *NeurIPS 2019*.
9. **Yichao Zhou**, Haozhi Qi, Simon Zhai, Qi Sun, Zhili Chen, Li-Yi Wei, Yi Ma. “Learning to Reconstruct 3D Manhattan Wireframes from Single Images”. *ICCV 2019 (Oral Presentation)*.
10. **Yichao Zhou**, Haozhi Qi, Yi Ma. “End-to-End Wireframe Parsing”. *ICCV 2019*.
11. Jingwei Huang, **Yichao Zhou**, Thomas Funkhouser, Leonidas Guibas. “FrameNet: Learning Local Canonical Frames of 3D Surfaces from a Single RGB Image”. *ICCV 2019*.
12. **Yichao Zhou**, Wei Chu, Sam Young, Xin Chen. “BandNet: A Neural Network-Based, Multi Instrument Beatles-Style MIDI Music Composition Machine”. *ISMIR 2019*.
13. Jingwei Huang*, **Yichao Zhou***, Matthias Nießner, Jonathan Shewchuk, Leonidas Guibas. “Quadri-Flow: A Scalable and Robust Method for Quadrangulation”. *SGP 2018 (Best Paper)*. Computer Graphics Forum. * indicates equal contribution.
14. **Yichao Zhou**, Bruce R. Donald, Jianyang Zeng. “Parallel Computational Protein Design”. *Methods in Molecular Biology*. 2016.
15. **Yichao Zhou**, Jianyang Zeng. “Massively Parallel A* Search on a GPU”. *AAAI 2015 (Oral Presentation)*.
16. **Yichao Zhou**, Yuexin Wu, Jianyang Zeng. “Computational Protein Design Using AND/OR Branch-and-Bound Search”. *RECOMB 2015*.
17. **Yichao Zhou**, Wei Xu, Bruce R. Donald, Jianyang Zeng. “An Efficient Parallel Algorithm for Accelerating Computational Protein Design”. *ISMB 2014. Bioinformatics*.

TOOLS & LANGUAGES

Intermediate Knowledge: Python, C/C++, CUDA, OpenGL, GLSL
Basic Knowledge: Shell, HTML/CSS/Javascript, Blender 3D, Fusion 360