Zhan ZHANG

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Address: 2306 Academic Surge, University of California, Davis

Education

University of California, Davis Sep 2021-

PhD. Computer Science

University of Science and Technology of China (USTC)

B.S with Honors, Applied Mathematics; B.S, Computer Science

Sep 2017- Jul 2021

Publications

Computational Design of Flexible Planar Microstructures 2023 Zhan Zhang, Christopher Brandt, Jean Jouve, Yue Wang, Tian Chen, Mark Pauly, Julian Panetta ACM Transactions on Graphics (SIGGRPAH Asia) 2023 Modeling and Fabrication with Specified Discrete Equivalence Classes 2021 Zhong-Yuan Liu, Zhan Zhang, Di Zhang, Chunyang Ye, Ligang Liu, Xiao-Ming Fu ACM Transactions on Graphics (SIGGRPAH) 2021 Gaze-Contingent Retinal Speckle Suppression for Perceptually-Matched Foveated Holographic Displays 2021 Praneeth Chakravarthula, Zhan Zhang, Okan Tursun, Piotr Didyk, Qi Sun, Henry Fuchs

Research Experiences

Computational Fabrication Lab, University of California, Davis PhD Candidate

Sep 2021-

Advisor: Prof. Julian Panetta and Prof. Joseph Teran

- Work on computational design of elastic metamaterials for large deformation
- Developed the first complete solution for designing microstructures over large deformation without collision

IEEE Transactions on Visualization and Computer Graphics (Proceedings of ISMAR) 2021

Tandon School of Engineering, New York University (NYU) Research Intern

Jul 2020- Oct 2020

Advisor: Prof. Qi Sun

- Proposed a method for the reduction of the perceived speckle noise by taking foveal and peripheral vision characteristics of the HVS into account in our perceptually-aware holographic projections
- Implement light propagation framework in PyTorch

Graphics & Geometric Computing Laboratory, USTC Undergraduate Research Fellow

Sep 2019- May 2020

Advisor: Prof. Xiaoming Fu and Prof. Ligang Liu

- Achieved a method of remeshing by local equidistant embedded anisotropic surface equivalence mesh
- Developed a geometric algorithm for infinite triangle distance norm

Awards & Scholarship

GGCS Spring Research Fellowship	2023
International Student Research Award	2021
"Outstanding Student" Scholarship in USTC	2017, 2019

Leadership & Activities

Student Union of the School of Gifted Young, USTC | Officer Sep 2017- Sep 2018 Student Union of USTC | Officer Sep 2017- Sep 2018

Skills

- Proficient in language: C++, Python
- Proficient in software: LaTeX, MATLAB, Houdini