Yuehao Wang

(+86) 17317150013 | wangyh3@shanghaitech.edu.cn

◇ Homepage http://yuehaolab.com/
◇ Github https://github.com/yuehaowang/
◇ LinkedIn https://linkedin.com/in/yuehaowang/

EDUCATION

ShanghaiTech University 2017-2021
B.Eng in Computer Science and Technology
Major GPA: 3.83/4.0

Selected courses: Computer Architecture (A), Operating Systems (A), Linear Algebra (A), Linear Algebra for Information Science (A), Artificial Intelligence (A), Subspace Learning (A, grad-level), Computer Graphics (A+), Web and Text Mining (A+)

RESEARCH INTEREST

Primarily lies in the areas of Computer Graphics, Computer Vision, and Deep Learning. Recent projects focus on Neural Rendering, 3D Vision, and Graph Learning.

PUBLICATION AND WORKING PAPER

1. Peihao Wang*, Yuehao Wang*, Hua Lin, Jianbo Shi, **SoGCN: Second-Order Graph Convolutional Networks**, submitted to *International Conference on Learning Representations (ICLR)*, 2021 (under review).
[Pdf] [OpenReview]

2. Minye Wu, Yuehao Wang, Qiang Hu, Jingyi Yu, **Multi-view Neural Human Rendering**, accepted by *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.
[Pdf] [Project Page]

Note: * indicates equal contribution.

RESEARCH EXPERIENCE

Virtual Reality and Virtual Computing Center Jul 2018 - Present
Supervisor: *Prof. Jingyi Yu (ShanghaiTech University)*
Participated in the work *Neural Human Rendering*, an end-to-end point-based neural rendering framework for producing photo-realistic free-view-video from multi-view dynamic human captures.
Participated in the project *Light Stage Relighting*, an image-based relighting framework based on the Light Stage capturing system.

Flare Lab Oct 2020 - Present
Supervisor: *Prof. Xiaopei Liu (ShanghaiTech University)*
Proposed the research topic *Neural Fluid Rendering*, an efficient rendering framework for high-resolution simulation by utilizing deep neural networks.

Summer Research Jul 2020 – Oct 2020
Supervisor: *Prof. Jianbo Shi (University of Pennsylvania)*
Proposed the research project *Second-Order Graph Convolutional Networks*, a novel graph convolutional network for multi-task graph learning based on theoretical analysis of graph filter space.

Attitude Research Lab Sep 2018 – Sep 2020
Supervisor: *Prof. Lifeng Yang (ShanghaiTech University)*
Data acquisition and analysis of the experiment *An Online Consumer Psychological Research Based on Live Broadcast Big Data.*
Development and maintenance of experiment platforms and laboratory management systems.

TEACHING EXPERIENCE

Teaching Assistant of Linear Algebra 2020 Fall, 2019 Fall
Instructor: *Prof. Yunfeng Jiang, Nicholas Lindsay*

Teaching Assistant of UTech Academy AI Camp (Data Science Track) 2020 Summer
Instructor: *Jason Wu (NYU), Zhen Zhu (Stanford), Kevin Huang (Stanford)*

Teaching Assistant of Introduction to Computer Programming 2018 Fall
Instructor: *Prof. Laurent Kneip*

HONORS AND AWARDS

1st Place of Citi Financial Innovation Application Competition Nov 2019
Issuer: Citigroup Services and Technology (China), Shanghai Technology Entrepreneurship Foundation for Graduates

1st Prize of Challenge Cup Competition of Science Achievement in China May 2019
Issuer: Shanghai Municipal Education Commission, Shanghai Academy of Social Sciences, Shanghai Science and Technology Committee

TECHNICAL SKILLS

Programming Languages
Python, C/C++, HTML5/JavaScript, MATLAB, C#, R

Software Frameworks & Tools
NumPy, PyTorch, SciPy, Scikit-learn, Pandas, Unity, OpenGL, Qt, OpenCV, NodeJs, ReactJs, Django, GNU/Linux, LaTex, Docker, Nginx

OTHER PROJECTS

Let's CG
A course project implemented essential algorithms and applications for rendering and geometry processing in the area of computer graphics, including OpenGL, global illumination, volume rendering, Loop subdivision, etc.
[Github] (Full-mark coursework of *Computer Graphics*)

Reinforcement Cache
A reinforcement learning-based method introduced into the cache replacement strategy to improve the miss rate of existing traditional cache replacement policies.
[Pdf] [Code] (Excellent course project of *Artificial Intelligence*)

Offer Pool
An experimental project for undergraduates to predict probabilities of graduate admission, built with data mining techniques, including data crawling, feature engineering, and machine learning.
[Github] (Excellent course project of *Web and Text Mining*)

Shadow Scent
A simple mobile game intended to help visually impaired people to obtain more friendly user experience audibly, based on efforts of desk research and interviews about entertainment needs with visually impaired people.
[Github] (First Prize at the roadshow of *Design Thinking*)

Pylash
A Python 2D game framework, created when in high school, with a series of common modules implemented, such as 2D graphics, event systems, media systems, tween animation, collision detection, etc.
[Github] (30+ stars, 15+ forks on Github)