

Education

Stony Brook University, NY

Ph.D. student in Computer Science

Sept. 2020 - Present

GPA 4.0/4.0

Advised by Prof. Dimitris Samaras

The Chinese University of Hong Kong, Shenzhen, China

B.S. in Statistics Sept. 2016 - Jun. 2020

GPA 3.6/4.0, Core GPA 3.9/4.0 & Rank 3/151

Experience

Research Assistant

Stony Brook University, NY

Sept. 2020 - Present

- · Conduct research on in-the-wild 3D reconstruction problems.
- · Combine neural volumetric surface reconstruction methods with the benefits of multi-view stereo for fast and robust 3D reconstruction with sparse input views.
- · Improve the performance of surface rendering by combining it with volume rendering for 3D reconstruction without masks.
- · Supervisor: Prof. Dimitris Samaras

Research Assistant

The Chinese University of Hong Kong, Shenzhen, China

Jan. 2019 - Jun. 2020

- · Worked on the low-level vision. Our team Won 1st place in Raw to RGB Image Mapping Challenge (ICCV Workshop).
- · Supervisor: Prof. Rui Huang

Research Intern

University of Ottawa, Canada

Jun. 2019 - Aug. 2019

- · Conducted research on person re-identification. Implemented channel grouping and a multi-branch strategy to improve the performance of person re-identification.
- · Supervisor: Prof. Robert Laganière

Publications

S-VolSDF: Sparse Multi-View Stereo Regularization of Neural Implicit Surfaces

Haoyu Wu, Alexandros Graikos, Dimitris Samaras

ICCV, 2023

HighEr-Resolution Network for Image Demosaicing and Enhancing

Kangfu Mei, Juncheng Li, Jiajie Zhang, **Haoyu Wu**, Jie Li, Rui Huang *ICCV Workshop*, 2019

Teaching

Stony Brook University

CSE 527: Introduction to Computer Vision

IAE 101: Digital Intelligence

Spring 2021 & Fall 2022

Fall 2021

Awards

Dean's List Award, School of Science and Engineering, CUHK(SZ)

Master's List, Shaw College, CUHK(SZ)

2017 - 2020
2018 - 2019