ZHUO SU

Phone number: (+86)18512449005Email: su-z18@mails.tsinghua.edu.cn

EDUCATION

M.S., Department of Automation, Tsinghua University, Beijing, China.

08/2018 - Present

GPA: 3.89/4.0 (GPA ranking: top 5%)

B.E., Department of Automation, Northeastern University, Shenyang, China.

09/2014 - 06/2018

GPA: 4.18/5.0 (GPA ranking: 5/276; Comprehensive ranking: 1/276)

RESEARCH INTERESTS

Performance Capture, Reconstruction of Dynamic Scenes, Photorealistic 3D Modeling

RESEARCH PROJECTS

Robust monocular volumetric Capture with Data-driven Cues

05/2019 - 03/2020

- · Introducing various data-driven visual cues to volumetric performance capture under monocular RGBD setting without pre-scanned template.
- · Eliminating the tedious and orchestrated self-scanning constraint by introducing data-driven huamn occupancy learning.
- · An effective robust performance capture schem with pose, shape and parsing priors, which can handle challenging human motions with reinitialization ability.

Performance Capture using Sparse and Unstructured Kinects

04/2018 - 04/2019

- · An unstructured multiview system using only three commercial RGBD sensors for real-time human performance capture.
- · A non-rigid skeleton warping scheme that enable online calibration and synchronization for unstructured setup.
- · A dynamic atlas texturing scheme for a high-quality appearance reconstruction in real-time.

Artificial landmark design for UAV localization and landing

04/2016 - 05/2017

· Designing an artificial landmark with color and hierarchy information and corresponding detection algorithm for accurate localization and landing of UAV.

PUBLICATIONS

Zhuo Su, Lan Xu, Zerong Zheng, Tao Yu, Yebin Liu, Lu Fang, "RobustFusion: Human Volumetric Capture with Data-driven Visual Cues using a RGBD Camera", European Conference on Computer Vision (ECCV, Spotlight), 2020.

Lan Xu, **Zhuo Su**, Lei Han, Tao Yu, Yebin Liu, Lu Fang, "UnstructuredFusion: Realtime 4D Geometry and Texture Reconstruction using Commercial RGBD Cameras", IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), 2019.

Wen Fei, **Zhuo Su***, Changfu Zhou, "Artificial landmark design and detection using hierarchy information for UAV localization and landing", Chinese Control And Decision Conference (CCDC), 2017. (*Corresponding author).

Haina Wu, **Zhuo Su**, Kai Luo, Qi Wang, XianZhong Cheng, "Exploration and Research on the Movement of Magnus Glider", Physical Experiment of College, 2015 (5): 2.

AWARDS

Excellent Bachelor Thesis Award, Northeastern University (NEU)	2018
Outstanding Graduate of Liaoning Province, Liaoning Province	2018
National Scholarship, Ministry of Education	2018
Excellence Award for National Undergraduate Innovation Program, NEU	2017
City's Excellent Undergraduate, Shenyang City	2017
Mayor's Scholarship, Shenyang City	2017
Top Ten Excellent Undergraduate (10/ the whole university), NEU	2017
$\textbf{Honorable Mention of American Mathematical Contest in Modeling}, \verb COMAP \\$	2017
Second Prize of National Mathematical Contest in Modeling, CSIAM	2016
First Prize of Provincial Mathematical Contest in Modeling, Liaoning Province	2016
2x Second Prize of Electronic Design Contest, Liaoning Province	2015-2016
4x First Class Scholarships, Northeastern University	2015-2018

SKILLS

C & C++ (OpenCV, OpenGL, CUDA, Eigen, ...), Python (Pytorch), Matlab, LaTeX