# ZHUO SU

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## EDUCATION

**M.S.**, Department of Automation, Tsinghua University, China. *GPA: 3.89/4* 08/2018 - Present

**B.E.**, Department of Automation, Northeastern University, China. *GPA: 4.18/5* 09/2014 - 06/2018

## 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 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 commerical 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 hierachy information and corresponding detection algorithnm 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.

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 and Mayor's Scholarship**, Shenyang city 2017

**Top Ten Undergraduate**, Northeastern University 2017

**Honorable Mention of American Mathematical Contest in Modeling**, COMAP 2017

**Second Prize of National Mathematical Contest in Modeling**, CSIAM 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