狄尚哲

15652587063 ◇ shangzhe.di@gmail.com

教育经历

北京航空航天大学 (BUAA) **2016.09 - 2020.07**

软件工程 北京

· GPA: 3.72

· 学习优秀奖学金一等奖 (Top 8%) 2019.11

· 学习优秀奖学金特等奖 (Top 3%) 2018.11

· 学科竞赛奖学金 2018.11

慕尼黑工业大学 (TUM) **2019.04 - 2019.08**

交换项目, *Informatics Department* 慕尼黑

· 中国留学基金委全额奖学金 2019.04

研究经历

虚拟试衣系统 **2019.10 - 至今**

算法实习生 快手 *Y-Tech Group*

· 系统共包含三个模块：1) 人体分割预测, 2) 衣服形变, 3) 换衣结果渲染，效果超越了现有的 SOTA 方法。

· 收集了一个虚拟试衣数据集，包含 20924 对模特与衣服图片，并提供衣服关键点、Densepose、人体分割等丰富的标注信息。

· 调研并复现虚拟试衣领域的经典论文，如 CP-VTON, ClothFlow, ACGPN 等

针对二维虚拟人物的人脸运动迁移算法 **2019.12 - 2020.05**

毕业设计，导师：吕云翔教授 北京航空航天大学

· 对面部运动进行简化和抽象，定义面部运动参数

· 收集并制作标注有面部运动参数的二维虚拟人物数据集

· 实现面部运动参数的计算、人脸到虚拟人物的表情和姿态迁移

Landmark-Free Facial Motion Transfer to VTubers **2019.05 - 2019.07**

研究助理, 导师：*Prof. Matthias Nießner* *TUM Visual Computing Group*

· 无需三维人脸重建和人脸关键点预测，使用 CNN 从人脸图片中直接预测 3DMM 模型参数

· 将 3DMM 参数转换成虚拟人物模型参数，实现面部运动迁移

技能

编程语言 Python, C++

库/框架 PyTorch, Numpy, OpenCV

英语 TOEFL: 107, GRE: 325

SHANGZHE DI

(86)15652587063 ◇ shangzhe.di@gmail.com

EDUCATION

Beihang University (BUAA) **Sep 2016 - Jul 2020**

B.E in Software Engineering *Beijing*

· Overall GPA: 3.71/4

· First Prize Scholarship for Academic Performance (Top 8%) Nov 2019

· Special Prize Scholarship for Academic Performance (Top 3%) Nov 2018

· Scholarships for Academic Competitions Nov 2018

Technical University of Munich (TUM) **Apr 2019 - Aug 2019**

Exchange program, Informatics Department *Munich*

· CSC Exchange Program Scholarship Apr 2019

RESEARCH EXPERIENCE

Flow-based Virtual Try-On System **Oct 2019 - Present**

Research Intern, Supervisor: Yilin Guo, Songtao Zhao *Kuaishou Y-Tech Group*

· Build a SOTA virtual try-on system that has three modules: a) human parsing estimating, b) cloth warping, and c) image rendering.

· Collect a large try-on dataset with 20,924 pairs of models and clothes, and rich annotations such as fashion landmarks, densepose, and human parsing.

Research on Facial Motion Transfer for Virtual Characters **2019.12 - 2020.05**

Bachelor Thesis, *Advisor: Prof. Yunxiang Lu* *BUAA*

· Use facial alignment techniques to calculate the proposed facial motion parameters from selfies.

· Collect an annotated 2D virtual character dataset.

· Change a virtual character's pose and expression by using appearance flow and alpha-blending methods.

Landmark-Free Facial Motion Transfer to VTubers **May 2019 - Jul 2019**

Research Assistant, Advisor: Prof. Matthias Nießner *TUM Visual Computing Group*

· Design an efficient network to estimate 3DMM pose and expression parameters from RGB video frames, which are then used to control the facial movements of VTubers.

· Enhance accuracy at large angles and computational efficiency towards landmark-based methods.

SKILLS

Languages	Python, C++
Platforms/Frameworks	Numpy, PyTorch, OpenCV
English	TOEFL 107, GRE 325