HUAYU CHEN

2# Zijing Student Apartment ⋄ Tsinghua University ⋄ Beijing 100084 P.R.China
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EDUCATION

Tsinghua University, Beijing, China *Aug, 2017 - Jul, 2021 (expected)*

* **Bachelor** of Engineering in Automation (expected)
* GPA: **3.87/4.0**, Ranking: **3/166**
* **Vice President** of Student Association of Science and Technology, Dept. of Automation

Core Courses

* **Mathematics**: Calculus (4.0/4.0 for both semesters), Linear Algebra (4.0/4.0 for both semesters), Stochastic Mathematical Methods (4.0/4.0), Introduction to Complex Analysis (4.0/4.0), etc.
* **Programming**: Computer Languages and Programming (4.0/4.0), C++ Program Design and Training (4.0/4.0), Data Structure and Algorithms (4.0/4.0), Computer Principles and Applications (4.0/4.0), etc.

SCHOLARSHIPS & AWARDS

2019 China National Scholarship (Highest scholarship given by the government of China,$<0.2\%$, expected)
2019 Champion of the International Design Contest (IDC ROBOCON 2019, MIT)
2019 Tsinghua Spark Program Membership (Top student program in the field of academic research in Tsinghua University, 37/3600)
2018 Captain of the champion team in the 20^{th} Electronic Design Competition (Highest level competition for undergraduates in Tsinghua University in the field of Electronic Engineering)
2018 1st Prize in the 35^{th} China Regional College Students Physics Competition ($<0.5\%$)
2018 129 Scholarship (Highest honor for students in the Dept. of Automation, 2/600)
2017 Captain of the champion team in the 1^{st} Artificial Intelligence Challenge
2016 1st Prize in the 33^{rd} National Physics Olympiad (Henan Province)

PUBLICATIONS & MANUSCRIPTS

[1] **Huayu Chen***, Zerong Zheng*, Yebin Liu. A Video-based Virtual Try-on System for Non-rigid Clothing. To be submitted.

RESEARCH EXPERIENCE

Tsinghua University, Beijing, China *Oct, 2018 - May, 2019*
Broadband Network Digital Media Lab, Department of Automation
Research Assistant, Advisor: **Associate Prof. Yebin Liu**
Project: A Video-based Virtual Try-on System for Non-rigid Clothing

- Propose a video-based virtual try-on system for non-rigid(half-rigid) clothing.
- Leverage both reconstructed 3d human model representations and a learned deep renfinement network to synthesis (near) video-realistic try-on results.
- First attempt to try adding dynamic details to clothes in virtual try-on systems using a generative adversarial network.

Tsinghua University, Beijing, China *June, 2019* - present
Intelligent Vision Group, Department of Automation
Research Assistant, Advisor: **Associate Prof. Jiwen Lu**
Currently working in the area of Network Architecture Search (NAS) based on evolutionary algorithm(EA) and reinforcement learning (RL).

TECHNICAL SKILLS

Basic Knowledge & Tools Python, MATLAB, C/C++, Tensorflow, Linux, FPGA, LaTeX

陈华玉

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教育经历

清华大学 **自动化技术** **学士学位** *2017/08 - 2021/07 (预计)*

* GPA: **3.87/4.0**，排名: **3/166**
* **星火计划**十三期成员 清华大学本科生学术组织, 37/3600
* 自动化系学生科协**副主席** 负责举办清华大学电子设计大赛与人工智能挑战赛

核心课程

* **数理基础**: 微积分 (A1,A2：4.0/4.0), 线性代数 (1,2：4.0/4.0), 大学物理 (B1,B2：4.0/4.0), 复变函数分析 (4.0/4.0), 概率论与数理统计 (4.0/4.0)，等。
* **编程能力**: 计算机程序设计 (4.0/4.0), C++ 程序设计与训练 (4.0/4.0), 数据结构 (4.0/4.0), 计算机原理与应用 (4.0/4.0)，等。

荣誉奖项

2019 **国家奖学金** (< 0.2%，预计)
2019 国际机器人设计大赛**冠军** (IDC ROBOCON 2019, MIT)
2018 清华大学第二十届电子设计大赛**特等奖队伍队长** (清华大学本科生电子类最高级别科技竞赛)
2018 第三十五届全国部分地区大学生物理竞赛一等奖 (< 0.5%)
2018 一二**九奖学金** (自动化系二年级本科生最高荣誉，高于国奖，2/166)
2017 清华大学第一届人工智能挑战赛**特等奖队伍队长**
2016 全国中学生物理竞赛一等奖 (河南省)

项目 & 论文

[1] **Huayu Chen***, Zerong Zheng*, Yebin Liu. A Video-based Virtual Try-on System for Non-rigid Clothing. To be submitted.

科研经历

清华大学 中国北京 *2018/10 - 2019/05*
宽带网数字媒体技术实验室
助理研究员, 导师：**刘烨斌副教授**
项目：A Video-based Virtual Try-on System for Non-rigid Clothing

- 给出了一套针对动态服装的虚拟换装系统
- 利用实时重建的三维人体模型和习得的深度优化网络来合成视频级别的虚拟换装视频
- 做了利用对抗生成网络学习模拟服装动态纹理变化的第一次尝试

清华大学 中国北京 *2019/06 - 今*
智能视觉实验室
助理研究员, 导师：**鲁继文副教授**
在基于遗传算法或强化学习的网络架构搜索领域开展研究

基本技能

工具 & 知识 Python, MATLAB, C/C++, Tensorflow, Linux, FPGA, LaTeX