

Xinran Lu

SN277 Computer Science Building 201 S. Columbia St. Chapel Hill, NC 27599-3175

☎ (919)519-6946 | ✉ connylu@cs.unc.edu | 🏠 <https://criminalking.github.io/> | 📠 xinran-lu-450514117

Education

University of North Carolina, Chapel Hill

PhD in Computer Science

Chapel Hill, USA

Aug. 2017 - May. 2022

Tsinghua University

B.ENG in Automation

Beijing, China

Aug. 2013 - Jul. 2017

- GPA: Overall: 3.70/4.00 Ranking: 23/150, Major: 3.82/4.00 Ranking: 12/150
- Core courses: Advanced computer graphics, Digital Image Processing 90(10/120), C++ Program Design and Training 94(8/125), Fundamentals of Computer Information Management 93(4/50), Data structures, Computer Principles and Applications 90(25/122), Computer Networks and Applications 90(8/96), Numerical Analysis and Algorithms 90(10/133), Linear Algebra, Calculus, Complex Analysis, Probability Theory

Research Experience

UNC Graphics & Virtual Reality Group of Department of Computer Science |

Research Assistant, Adviser: Prof. Henry Fuchs

Chapel Hill, USA

Project: Egocentric Face Reconstruction with Side Cameras on VR Glasses

Aug. 2017 - Now

Broadband Network & Digital Media Lab of Department of Automation | Research

Assistant, Adviser: Prof. Yebin Liu

Beijing, China

Project: Human Animation based on motion extraction from videos

Feb. 2017 - July. 2017

- Proposed a new method to address character animation with only one RGB camera(video)
- Integrated shape parameter from human model and pose parameter from video
- Optimized results with inter-frame information

Institute of HCI and Media Integration of Department of Computer Science |

Research Assistant, Adviser: Prof. Songhai Zhang

Beijing, China

Project: Neural Color Transfer

Sep. 2016 - Jan. 2017

- Worked on photographer style transfer based on neural style transfer and colorization
- Proposed a new method to solve the problem of color bleeding during the transfer
- Trained a new neural network to smooth the result

Project: Image and Video Matting in Real-Time

Mar. 2016 - Jun. 2016

- Independently constructed a system to generate Trimap automatically, combine Sampling and Affinity Matting with Local and Non-local Smooth Priors
- Improved the algorithm by using the expanded regions to accelerate computing speed

Image Algorithm Research Intern, Turing Robot | Research Assistant, Adviser: Dr.

Yuhao Lu

Beijing, China

Project: Pose Imitation of Robot in ROS System

Jul. 2016 - Sep. 2016

- Developed a pose estimation system with binocular camera in ROS platform and make robot to perform simulations of human movement in real-time
- Proposed an algorithm to locate people, match ICP, extract skeleton and compute similarity
- Implemented a 3D body model composed of 10 main body parts to improve results

33th Challenge Cup

Beijing, China

Project: An Augmented Reality Technology based on Hand Recognition

Feb. 2015 - Mai. 2015

- Constructed an AR system with projector, camera and computer to assist instruction. Projector cast augmented reality information manipulated by computer, camera collected input image, and computer completed image preprocessing, hand recognition and feedback generation
- Implemented state-of-the-art algorithms to capture video, adjust image, recognize hand and optimize accuracy

Technical Strengths

- Languages: English, German, Mandarin
- Programming language: Assembly Language, C/C++, Python, C#, MATLAB, Lua
- Operation System: Mac OS, Linux, Windows

Honors & Awards

2017	5/150 , Outstanding Tsinghua Undergraduate Thesis	<i>Tsinghua, China</i>
2016	20/150 , Undergraduate Academic Excellence Award	<i>Tsinghua, China</i>
2015	10/150 , been selected into ATOM project of Department of Automation	<i>Tsinghua, China</i>
2015	3/400 , EMC Special Award in the 33th Challenge Cup	<i>Tsinghua, China</i>
2015	5/400 , HuaWei Special Award in the 33th Challenge Cup	<i>Tsinghua, China</i>
2015	46/400 , Third price in the 33th Challenge Cup	<i>Tsinghua, China</i>

Extracurricular Activity

2016	Director , Student Press Corps of THU	<i>Tsinghua, China</i>
2015	Director , Student Association for Science and Technology of Department of Automation	<i>Tsinghua, China</i>
2014	Member , Public Affairs Sector of Student Union of THU	<i>Tsinghua, China</i>