

Xinran Lu

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Education

Tsinghua University

Beijing, China

B.ENG in Automation

Aug. 2013 - Jul. 2017

- GPA: Overall: 3.70/4.00 Ranking: 27/150, Major: 3.82/4.00 Ranking: 16/150
- 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

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

Beijing, China

Research Assistant, Adviser: Prof. Songhai Zhang

Project: Neural Color Transfer

Sep. 2016 - Jan. 2016

- 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.

Beijing, China

Yuhao Lu

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 (GRE: V158 + Q170 + AW3.5, Toefl: R26 + L23 + W25 + S23), German (DSD C1), Mandarin (native)
- Programming language: Assembly Language, C/C++, Python, C#, MATLAB, Lua, GIT

Honors & Awards

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

Extracurricular Activity

2015 **Director**, Student Press Corps of THU

2015 **Director**, Student Association for Science and Technology of Department of Automation

2014 **Member**, Public Affairs Sector of Student Union of THU

Tsinghua, China

Tsinghua, China

Tsinghua, China