

YIXUAN WEI

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Room 825, Central Main Building, Tsinghua University

Haidian District, Beijing City ◇ P.R.China, 100084

EDUCATION

A Junior at Tsinghua University, Beijing, China

Department of Automation

September 2016 - Present

Overall GPA: **3.6/4**, RANK: **12/164**

Second Degree at Tsinghua University, Beijing, China

Business Administration

September 2017 - Present

AWARDS AND SCHOLARSHIPS

Comprehensive Scholarship(0.5% of student body per year), Tsinghua University

2017

Social Practice Excellence Award, Tsinghua University

Social Service Excellence Award, Tsinghua University

National Scholarship, Ministry of Education of China

2018

The Second Prize in the 36th *Challenge Cup* Students Extracurricular Academic Science and Technology Contest, Tsinghua University

The First Prize in the 20th National Robot and Artificial Intelligence Competition, Chinese Association for Artificial Intelligence

RESEARCH INTERESTS

- **Computer Vision** — 3D Vision / Biological Application
- **Machine Learning** — Multimodal Learning / Reinforcement Learning
- **Robotics** — Robotic Vision / Active Perception

RESEARCH EXPERIENCE

Sakura Exchange Program in Science

Short Term Exchange Student

August 2017

Soka University, Japan

- Visited a few famous enterprises in Japan and attended some conferences on their recent research projects and results.
- Visited Soka University, Japan. Visited some laboratories on the campus and talked with some researchers and Ph.D students.

With Prof. Huaping Liu

Undergraduate Researcher

September 2017 - Present

Computer Science Department, THU

- Research on **Robotic Vision and Multimodal Sensors**
- Work in a group of four with a focus on utilizing multimodal sensors(visual & tactile) to increase the success rate of grasping objects for robots.
- Designed and built a robotic hand with both the fingers and suction cup, for which we have applied for a patent. My work is mainly about the processing of visual signals and using Deep Reinforcement Learning to generate a grasping policy for the agent.
- Recently we are focusing on applying active perception to object grasping in complex scenario.

With Prof. Yebin Liu
Undergraduate Researcher

May 2018 - Present
BBNC Lab, THU

- Research on **3D Vision and Model Reconstruction**
- Worked with a Ph.D candidate on a detailed geometrical reconstruction of a human body from a single RGB-image.
- Constructed a human model dataset that pairs detailed mesh, synthetic images and skeleton with a corresponding human model and applied Deep Learning to solve the classification problem.
- Current research focus is on motion capture of laboratory mice with a multi-camera system(a long term project). Recently my work is on the 2D joints detection of mice and skeleton reconstruction.

SKILLS

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| Programming | C/C++, C#, MATLAB, Python |
| Software & Tools | Latex, Adobe Photoshop, Adobe Premiere |
| Language | Chinese(Native), English(TOFEL 102) |

RELEVANT COURSES

Core Courses

Digital Electronics
Fundamentals of Analog Electronics
Theory of Automatic Control
Data Structures
Digital Image Processing
Numerical analysis & Algorithm

Other Courses

Calculus & Linear Algebra
Probability and Statistics
Signals & System Analysis
Embedded System design & Applications
Computer Principles & Applications
Big Data & Machine Intelligence