

# Yi-Chun Chen

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## EDUCATION

**National Tsing Hua University (NTHU)** GPA: 3.48/4.3 Last60 GPA: 3.83/4.3 Hsinchu, Taiwan  
Bachelor of Science in Power Mechanical Engineering Sept. 2013 – June 2017  
Research Interest: Robotics, Computer Vision, Artificial Intelligence, Dynamic System and Controls

## WORKING EXPERIENCE

**Dept. of Electrical Engineering, National Tsing Hua University** Hsinchu, Taiwan  
Vision Science Laboratory Research Assistant July 2017 – Present

- Developing a view selection algorithm for 360° videos with Pytorch.
- Integrating vision and natural language processing in 360° videos application.

**HIWIN Technologies Corporation** Taichung, Taiwan  
Production Management Department Summer Intern Summer 2015

- Standardized operation procedures for manufacturing ballscrews for newcomers.

## PUBLICATIONS

### Conference

S.-H. Chou, **Yi-Chun Chen**, K.-H. Zeng, H.-N. Hu, J.-l. Fu, M. Sun, “Self-view Grounding Given a Narrated 360° Video”, AAAI Conference on Artificial Intelligence, New Orleans, U.S.A., 2018.

### Workshop

S.-H. Chou, **Yi-Chun Chen**, K.-H. Zeng, H.-N. Hu, J.-l. Fu, M. Sun, “Self-view Grounding Given a Narrated 360° Video”, International Conference on Computer Vision (ICCV) – Workshop on Closing the Loop Between Vision and Language, Venice, Italy, 2017. *Spotlight*

## RESEARCH EXPERIENCE

**Show and Tell in 360° Videos, NTHU** Sept. 2017 – Present

- Devising a model to automatically select salient viewpoints in 360° videos and generate corresponding descriptions.

**Blind Grasping, NTHU** July 2017 – Present

- Inventing a grasping system using vision techniques and producing the wearable device for blind people.

**Miniature Cell Sorter, NTHU** Oct. 2015 – Oct. 2016

- Constructed and manufactured a miniature flow cytometer using microfluidic chip.
- Designed real-time recognition system to distinguish particles of 10uM and 15uM in size with OpenCV.

## PROJECTS

**Soccer Robot, 3rd Prize, NTHU** Feb. 2017 – June 2017

- Implemented A\* algorithm with a camera on Matlab for a ROS-based robot's path planning and obstacle avoiding.
- Achieved accurate position control by designing PID controller for DC motors.

**Task-oriented Self-driving Mobile Robot, NTHU** Feb. 2016 – June 2016

- Built automobile car with obstacle avoiding, line tracing, balancing, and communication functions.

## SKILLS

**Programming:** Python, C/C++, Java  
**Libraries:** Pytorch, ROS, OpenCV

**Simulation Software:** MATLAB, LTSpice, COMSOL Multiphysics  
**3D Modeling:** Inventor, SolidWorks, AutoCAD