

# Shih-Han Chou | CV

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## Education

### Academic Qualifications

- **University of British Columbia** **Vancouver, Canada**  
Computer Science, PhD student in Computer Vision Lab  
09/2019–current
- **National Tsing Hua University** **Hsinchu, Taiwan**  
Electrical Engineering, Master student in ACS (automatic control and signal) Lab  
GPA: 4.1/4.3  
09/2014–06/2017
- **RWTH AACHEN University** **Aachen, Germany**  
Electrical Engineering, An exchange student for one semester.  
10/2016–03/2017
- **National Sun Yat-Sen University** **Kaohsiung, Taiwan**  
Mechanical and Electromechanical Engineering,  
GPA: 3.8/4.0 (overall); 3.8/4.0 (major); 3.9/4.0 (last-60)  
Rank: Top 7.4% (4th/54)  
09/2011–06/2014
- **National Changhua University of Education** **Changhua, Taiwan**  
Mechatronics Engineering,  
Transfer to National Sun Yat-Sen University at September 2011.  
09/2010–06/2011

### Publications

#### Conference

- **Shih-Han Chou**, Wei-Lun Chao, Wei-Sheng Lai, Min Sun, Ming-Hsuan Yang, "Paper title omitted for double-blind reviews", under submission.
- **Shih-Han Chou**, Cheng Sun, Wen-Yen Chang, Wan-Ting Hsu, Min Sun, Jainlong Fu, "360-Indoor: Towards Learning Real-World Objects in 360° Indoor Equirectangular Images", WACV20'.
- **Shih-Han Chou**, Yi-Chun Chen, Kuo-Hao Zeng, Hou-Ning Hu, Jainlong Fu, Min Sun, "Self-view Grounding Given a Narrated 360° Video", AAAI18'.
- Kuo-Hao Zeng, **Shih-Han Chou**, Fu-Hsiang Chan, Juan Carlos Niebles, Min Sun, "Agent-Centric Risk Assessment: Accident Anticipation and Risky Region Localization", CVPR17', **spotlight**.

#### Workshop

- **Shih-Han Chou**, Yi-Chun Chen, Cheng Sun, Kuo-Hao Zeng, Ching-Ju Cheng, Jainlong Fu, Min Sun, "Towards 360° Show-and-Tell", ECCV18' - Workshop on 360° Perception And Interaction
- **Shih-Han Chou**, Yi-Chun Chen, Kuo-Hao Zeng, Hou-Ning Hu, Jainlong Fu, Min Sun, "Self-view Grounding Given a Narrated 360° Video", ICCV17' - Workshop on Closing the Loop Between Vision and Language, **spotlight**.

#### Master Thesis

- **Shih-Han Chou**, Wei-Yu Chen, Bor-Sen Chen, "Multiobjective Design for Joint Precoding and Equalization of MIMO OFDM Systems with simultaneous post-detection SINR Maximization and Power Consumption Minimization". Master thesis

### Research Experience

- **Computer Vision Lab** Advisor: Prof. Leonid Sigal  
Visual Commonsense Reasoning, Visual Question Answering (2019 - current)
- **Vision and Learning Lab** Advisor: Prof. Ming-Hsuan Yang  
Visual Question Answering (2018 - 2019)

- **Vision Science Lab** *Advisor: Prof. Min Sun*  
360° Object detection (2018 - 2019)  
360° Video grounding, show and tell (2017 - 2018)  
Accident anticipation (2017)
- **Automatic Control and Signal Lab**  
Robust control and  $H_\infty$  control in wireless communication (2014 - 2017)
- **Bio-Medical Micro Electro Mechanical Systems Lab**  
The correlation between Heart Rate Variability and Apnea-Hypopnea Index is BMI dependent (2014)  
The relation between vertical ground reaction force and heart rate during treadmill running (2013 - 2014)

## Notable Projects.....

- **Computer Vision for Visual Effects** *Term Project*  
Our project page: <https://sites.google.com/site/computervisionvisualeffectsg11/home>
- **Image Processing** *Final Project*

## Honors and Awards

- **Scholarships for Excellent Students to Study Abroad from Ministry of Education Taiwan (2016)**
- **NSYSU Undergraduate Outstanding Reports of Special Project (2013)**  
Topic: Estimating the relation between vertical ground reaction force and heart rate with different exercising strength during treadmill running.

## Previous Employment

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|---|---|
| ○ <b>Research Assistant</b><br><i>Vision Science Lab (National Tsing Hua University)</i>                            | <b>Hsinchu, Taiwan</b><br><i>August 2018–January 2019</i>       |
| ○ <b>Intern</b><br><i>Appier</i>  | <b>Taipei, Taiwan</b><br><i>April 2018–July 2018</i>            |
| ○ <b>Research Assistant</b><br><i>Vision Science Lab (National Tsing Hua University)</i>                            | <b>Hsinchu, Taiwan</b><br><i>June 2017–March 2018</i>           |
| ○ <b>MediaTek Summer Intern</b><br><i>MediaTek Inc.</i>   | <b>Hsinchu, Taiwan</b><br><i>July 2014–August 2014</i>          |
| ○ <b>HIWIN Summer Intern</b><br><i>HIWIN Technologies Corp.</i>   | <b>Taichung, Taiwan</b><br><i>July 2013–August 2013</i>         |
| ○ <b>Receptionist in The 43th International Symposium on Robotics</b><br><i>International Symposium on Robotics</i> | <b>Taipei, Taiwan</b><br><i>28, August 2012–30, August 2012</i> |