

# CHIH-HUI HO

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## EDUCATION

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- University of California San Diego, La Jolla, CA** Sep. 2019 - Now  
PhD student in Electrical and Computer Engineering
- University of California San Diego, La Jolla, CA** Sep. 2017 - Jun. 2019  
M.S. in Computer Science, GPA: 3.87/4.0
- University of Illinois at Urbana-Champaign, Champaign, IL** Jan. 2016 - May 2016  
Exchange student in Computer Science, GPA: 3.71/4.0
- National Chiao Tung University, Hsinchu, Taiwan** Sep. 2012 - Jun. 2016  
B.S. in EECS Honor Program, GPA: 4.15/4.3

## RESEARCH INTEREST

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- Computer Vision:** Recognition, Multiview object classification, 3D understanding  
**Deep Learning:** Metric learning, Adversarial attack, Self-supervised learning, Continuous learning

## PUBLICATION

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- Tz-Ying Wu, Pedro Morgado, Pei Wang, **Chih-Hui Ho**, Nuno Vasconcelos. Solving Long-tailed Recognition with Deep Realistic Taxonomic Classifier, In *European Conference on Computer Vision (ECCV)*, 2020.
- **Chih-Hui Ho**, Bo Liu, Tz-Ying Wu, Nuno Vasconcelos. Exploit Clues from Views: Self-Supervised and Regularized Learning for Multiview Object Recognition, In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.
- **Chih-Hui Ho**, Pedro Morgado, Amir Persekian, Nuno Vasconcelos. PIEs: Pose Invariant Embeddings, In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.
- **Chih-Hui Ho**<sup>\*</sup>, Brandon Leung<sup>\*</sup>, Erik Sandstrom, Yen Chang, Nuno Vasconcelos, "Catastrophic Child's Play: Easy to Perform, Hard to Defend Adversarial Attacks", In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.
- Jen-Hui Chuang, **Chih-Hui Ho**, Ardian Umam, HsinYi Chen, Mu-Tien Lu, Jenq-Neng Hwang, Tai-An Chen. A New Technique of Camera Calibration: A Geometric Approach Based on Principal Lines <https://arxiv.org/abs/1908.06539>, 2019. on-submission to IEEE Transaction on Image Processing (TIP).
- Yu-Shiuan Tsai, Yi-Yu Hsieh, **Chih-Hui Ho**, Ya-Ching Chang, Yao-Yuan Chang, Heng-Jyun Lin, Han-Yang, Wang; Yu-Chen Chou, Jen-Hui Chuang. Rule-Based Optical Character Recognition for Serial Number on Renminbi Banknote, In *IS&T Electronic Imaging 2018 (EI)* (oral presentation)

## ACADEMIC SERVICES

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- **Reviewer:** NIPS (2020), CVPR (2020), ECCV (2020), ACCV (2020), WACV (2021), ICIP (2019, 2020)
- **Teaching Assistant:** ECE 271B Statistical Learning II, ECE 271C Deep Learning and Applications, UCSD

## PROFESSIONAL EXPERIENCE

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- Graduate Student Researcher, Statistical Visual Computing Lab, UCSD** Jan. 2018 - Now
- Working on multiview recognition, self-supervised learning, structured embedding
- Research Assistant, NCTU Computer Vision Research Center** Nov. 2016 - Jun. 2017
- Designed bill serial number recognition system with more than 99 % accuracy
  - Developed camera calibration algorithm and implemented the algorithm into prototype
- Software Engineer Internship, Industrial Technology Research Institute** Jan. - Dec. 2015
- Developed a prototype to calibrate robotic arm with an industrial camera
  - Attended 2015 Taiwan Automation Intelligence and Robot Show
  - Received Mechanical and Systems Research Lab Prospective Project Excellence Award

## SKILLS

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**Languages:** Python, C/C++ , MATLAB, C#

**Library:** Pytorch, Tensorflow, Numpy, Pandas, Matplotlib, MatConvNet, OpenCV, Keras, L<sup>A</sup>T<sub>E</sub>X