

CONTACT INFORMATION	University of Michigan Computer Science and Engineering 2260 Hayward Street Ann Arbor, MI 48109-2121	(734) 730-7701 ywchao@umich.edu http://www.umich.edu/~ywchao/
RESEARCH INTERESTS	Computer vision, machine learning, object/activity recognition, 3D scene understanding	
EDUCATION	University of Michigan , Ann Arbor, MI Ph.D. in Computer Science and Engineering Advisor: Prof. Jia Deng	Sept 2013 to present
	University of Michigan , Ann Arbor, MI M.S. in Electrical Engineering: Systems Advisor: Prof. Silvio Savarese	Sept 2011 to Apr 2013 GPA: 3.96/4.00
	National Chiao Tung University , Hsinchu, Taiwan B.S. in Electronics Engineering Minor in Applied Mathematics	Sept 2005 to June 2009 GPA: 85.45/100.00
	Carnegie Mellon University , Pittsburgh, PA International Exchange Program	Fall 2008 GPA: 3.80/4.00
WORK EXPERIENCE	University of Michigan , Ann Arbor, MI <i>Graduate Student Research Assistant (GSRA)</i> <ul style="list-style-type: none">• Human action understanding• Advisors: Prof. Jia Deng	Sep 2014 to present
	DAQRI , Mountain View, CA <i>Research Intern</i> <ul style="list-style-type: none">• Mentors: Chris Broadus, Wenyi Zhao, Byungsoo Kim	May 2014 to Aug 2014
	Stanford University , Stanford, CA <i>Visiting Student Researcher</i> <ul style="list-style-type: none">• Advisor: Prof. Silvio Savarese	July 2013 to Dec 2013
	University of Michigan , Ann Arbor, MI <i>Graduate Student Research Assistant (GSRA)</i> <ul style="list-style-type: none">• 3D layout estimation of indoor scenes• Human group activity recognition• Advisor: Prof. Silvio Savarese	May 2013 to April 2014
	Academia Sinica , Taipei, Taiwan <i>Research Assistant</i> <ul style="list-style-type: none">• Image classification via sparse representation• Supervised dictionary learning for sparse representation• Mentor: Dr. Yu-Chiang Frank Wang	Aug 2010 to July 2011
PUBLICATIONS	Y.-W. Chao , Z. Wang, R. Mihalcea, and J. Deng. Mining Semantic Affordances of Visual Object Categories. In <i>Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2015. W. Choi, Y.-W. Chao , C. Pantofaru, and S. Savarese. Indoor Scene Understanding with Geometric and Semantic Contexts. <i>International Journal of Computer Vision (IJCV)</i> , Vol. 112, Issue 2, pp.204–220, April 2015. W. Choi, Y.-W. Chao , C. Pantofaru, and S. Savarese. Discovering Groups of People in Images. In <i>Proceedings of the European Conference on Computer Vision (ECCV)</i> , 2014.	

- Y.-W. Chao**, W. Choi, C. Pantofaru, and S. Savarese. Layout Estimation of Highly Cluttered Indoor Scenes using Geometric and Semantic Cues. In *Proceedings of the International Conference on Image Analysis and Processing (ICIAP)*, 2013. (**oral presentation**, 7.9% acceptance rate)
- W. Choi, **Y.-W. Chao**, C. Pantofaru, and S. Savarese. Understanding Indoor Scenes using 3D Geometric Phrases. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013. (**oral presentation**, 3.2% acceptance rate)
- C.-P. Wei, **Y.-W. Chao**, Y.-R. Yeh, and Y.-C. F. Wang. Locality-Sensitive Dictionary Learning for Sparse Representation Based Classification. *Pattern Recognition*, Vol. 46, No. 5, pp.1277–1287, May 2013.
- S. Y. Bao, M. Bagra, **Y.-W. Chao**, and S. Savarese. Semantic Structure From Motion with Points, Regions, and Objects. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2012.
- Y.-W. Chao**, Y.-R. Yeh, Y.-W. Chen, Y.-J. Lee, and Y.-C. F. Wang. Locality-constrained Group Sparse Representation for Robust Face Recognition. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, 2011.

TEACHING EXPERIENCE

- Computer Vision (EECS 542)**, University of Michigan Fall 2014
Graduate Student Instructor (GSI)
- Computer Vision (EECS 442)**, University of Michigan Fall 2012
Graduate Student Instructor (GSI)
- Served as the only GSI for a class with 80+ student
 - Taught weekly section on topics from class; demonstrated off-the-shelf softwares
 - Managed an online forum for discussions; held office hours to provide individualized help

AWARDS AND HONORS

- Rackham Conference Travel Grant, University of Michigan March 2015
- Government Scholarships for Study Abroad (GSSA), Ministry of Education, Taiwan May 2011
- Study Abroad Scholarship for Outstanding College Students, Ministry of Education, Taiwan Fall 2008
- Academic Achievement Award, National Chiao Tung University Spring 2008

PROFESSIONAL SERVICE

- Reviewer
- International Conference on Pattern Recognition (ICPR), 2014
 - International IEEE Workshop on 3D Representation and Recognition (3dRR-13), 2013
 - International Conference on Image Analysis and Processing (ICIAP), 2013
- Student Volunteer
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013
 - IEEE Statistical Signal Processing Workshop (SSP'12), 2012

OTHER ACHIEVEMENTS

- Technology Transfer - Industrial Technology Research Institutes, Hsinchu, Taiwan Dec 2011
- Sparse Representation Based Face Recognition Technology

SKILLS AND LANGUAGES

Programming Languages: MATLAB, C/C++, OpenCV, Python, UNIX shell scripting, and others

Operating Systems: Linux, Windows and Mac OS X

Languages: English, Chinese (Mandarin), and Taiwanese