

Yu-Wei Chao

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/human action recognition, 3D scene understanding	
EDUCATION	University of Michigan , Ann Arbor, MI Ph.D. in Computer Science and Engineering Advisor: Prof. Jia Deng	Sept 2013 – present
	University of Michigan , Ann Arbor, MI M.S. in Electrical Engineering: Systems Advisor: Prof. Silvio Savarese	Sept 2011 – Apr 2013
	National Chiao Tung University , Hsinchu, Taiwan B.S. in Electronics Engineering Minor in Applied Mathematics	Sept 2005 – June 2009
	Carnegie Mellon University , Pittsburgh, PA International Exchange Program	Fall 2008
WORK EXPERIENCE	Google Research , Los Angeles, CA <i>Software Engineering Intern</i> <ul style="list-style-type: none">• Human action detection in videos• Host: Sudheendra Vijayanarasimhan	June 2017 – Sept 2017
	Adobe Research , San Jose, CA <i>Computer Vision Research Intern</i> <ul style="list-style-type: none">• Human pose forecasting• Mentors: Jimei Yang, Brian Price, Scott Cohen	June 2016 – May 2017
	University of Michigan , Ann Arbor, MI <i>Graduate Student Research Assistant (GSRA)</i> <ul style="list-style-type: none">• Visual recognition of human-object interactions• Advisor: Prof. Jia Deng	Sep 2014 – present
	DAQRI , Mountain View, CA <i>Research Intern</i> <ul style="list-style-type: none">• 3D scene understanding for augmented reality• Mentors: Chris Broaddus, Wenyi Zhao, Byungsoo Kim	May 2014 – Aug 2014
	Stanford University , Stanford, CA <i>Visiting Student Researcher</i> <ul style="list-style-type: none">• 3D layout estimation of indoor scenes• Human group activity recognition• Advisor: Prof. Silvio Savarese	July 2013 – Dec 2013
	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 – July 2011
CONFERENCE PUBLICATIONS	Forecasting Human Dynamics from Static Images <i>Computer Vision and Pattern Recognition (CVPR) 2017</i> Yu-Wei Chao, Jimei Yang, Brian Price, Scott Cohen, Jia Deng	

HICO: A Benchmark for Recognizing Human-Object Interactions in Images

International Conference on Computer Vision (ICCV) 2015

Yu-Wei Chao, Zhan Wang, Yugeng He, Jiaxuan Wang, Jia Deng

Mining Semantic Affordances of Visual Object Categories

Computer Vision and Pattern Recognition (CVPR) 2015

Yu-Wei Chao, Zhan Wang, Rada Mihalcea, Jia Deng

Discovering Groups of People in Images

European Conference on Computer Vision (ECCV) 2014

Wongun Choi, Yu-Wei Chao, Caroline Pantofaru, Silvio Savarese

Layout Estimation of Highly Cluttered Indoor Scenes using Geometric and Semantic Cues

International Conference on Image Analysis and Processing (ICIAP) 2013 (Oral, 7.9% acceptance rate)

Yu-Wei Chao, Wongun Choi, Caroline Pantofaru, Silvio Savarese

Understanding Indoor Scenes using 3D Geometric Phrases

Computer Vision and Pattern Recognition (CVPR) 2013 (Oral, 3.2% acceptance rate)

Wongun Choi, Yu-Wei Chao, Caroline Pantofaru, Silvio Savarese

Semantic Structure From Motion with Points, Regions, and Objects

Computer Vision and Pattern Recognition (CVPR) 2012

Sid Ying-Ze Bao, Mohit Bagra, Yu-Wei Chao, Silvio Savarese.

Locality-constrained Group Sparse Representation for Robust Face Recognition

International Conference on Image Processing (ICIP) 2011

Yu-Wei Chao, Yi-Ren Yeh, Yu-Wen Chen, Yuh-Jye Lee, Yu-Chiang Frank Wang

JOURNAL
PUBLICATIONS

Indoor Scene Understanding with Geometric and Semantic Contexts

International Journal of Computer Vision (IJCV) 2015

Wongun Choi, Yu-Wei Chao, Caroline Pantofaru, Silvio Savarese

Locality-Sensitive Dictionary Learning for Sparse Representation Based Classification

Pattern Recognition 2013

Chia-Po Wei, Yu-Wei Chao, Yi-Ren Yeh, Yu-Chiang Frank Wang

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

Adobe Travel Grant

July 2017

Google Ph.D. Fellowship

2016 – present

Qualcomm Innovation Fellowship Finalist

April 2016

Rackham Conference Travel Grant, University of Michigan

March 2015, July 2017

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

- Computer Vision and Pattern Recognition (CVPR), 2016, 2017
- International Conference on Computer Vision (ICCV), 2017
- European Conference on Computer Vision (ECCV), 2016
- International Conference on Intelligent Robots and Systems (IROS), 2016

Student Volunteer

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013

OTHER
ACHIEVEMENTS

Contributor to open source projects

- Caffe: a popular tool for Deep Learning

Technology Transfer - Industrial Technology Research Institutes, Hsinchu, Taiwan

Dec 2011

- Sparse Representation Based Face Recognition Technology

SKILLS AND
LANGUAGES

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

Libraries: TensorFlow, Torch, Caffe, OpenCV

Operating Systems: Linux, Windows and Mac OS X

Languages: English, Chinese (Mandarin), and Taiwanese