

CATHERINE LIH-LIAN WAH

CONTACT INFORMATION

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EDUCATION

University of California, San Diego (UCSD) La Jolla, CA

PhD, Computer Science, expected graduation date: 2013
M.S., Computer Science, December 2011

University of Illinois, Urbana-Champaign (UIUC), Urbana, IL

B.S., Electrical Engineering with Honors, August 2008

- Chancellor's Scholar, Edmund J. James Scholar
- Minors in Computer Science and Mathematics

ACADEMIC EXPERIENCE

Computer Science and Engineering Department, UCSD, La Jolla, CA

Graduate Student Researcher September 2008 to present
Computer Vision Lab, Advisor: Prof. Serge Belongie

- *Visipedia*: **visual recognition** of fine-grained categories
- *Parking space vacancy monitoring*: identification of vacant parking spaces under occlusion using **stereo reconstruction**

Electronic Engineering Dept., Chinese University of Hong Kong, Hong Kong

Visiting Research Staff June 2010 to August 2010
Image and Video Processing Lab, Mentor: Prof. Xiaogang Wang

- *Visipedia*: integration of **part localization** for visual recognition

Intel Undergraduate Research Program, UIUC, Urbana, IL

Intel Research Scholar January 2005 to August 2008
Image Formation and Processing Group, Advisor: Prof. Thomas Huang

- *Hand gesture recognition*: investigated **manifold learning** methods to compactly represent natural variation found in human hands (senior thesis)

Electrical and Computer Engineering Department, UIUC, Urbana, IL

Teaching Assistant August 2007 to May 2008

- *Analog Signal Processing (ECE 210)*: taught three lab sections, graded weekly lab/homework assignments

College of Engineering, UIUC, Urbana, IL

Engineering Learning Assistant April 2007 to October 2007

- Taught 30 freshmen in introductory seminar to College of Engineering

PUBLICATIONS/ PRESENTATIONS

- C. Wah, S. Branson, P. Perona, S. Belongie. "Multiclass Recognition and Part Localization with Humans in the Loop". *International Conference on Computer Vision (ICCV)*. Barcelona, Spain, Nov. 2011.
- S. Branson, C. Wah, B. Babenko, F. Schroff, P. Welinder, P. Perona, S. Belongie. "Visual Recognition with Humans in the Loop". *European Conference on Computer Vision (ECCV)*. Heraklion, Crete, Sept. 2010.

- C. Wah, S. Branson, P. Perona, S. Belongie. “Interactive Localization and Recognition of Fine-Grained Visual Categories”. *First Workshop on Fine-Grained Visual Categorization (FGVC)*. Colorado Springs, CO, June 2011.
- C. Wah, S. Branson, P. Welinder, P. Perona, S. Belongie. “Birds-200: A Dataset For Fine-Grained Visual Categorization”. *First Workshop on Fine-Grained Visual Categorization (FGVC)*. Colorado Springs, CO, June 2011.
- C. Wah. “Crowdsourcing and Its Applications in Computer Vision”. *UCSD CSE Research Exam*. May 2011.
- C. Wah, S. Branson, P. Welinder, P. Perona, S. Belongie. “The Caltech-UCSD Birds-200-2011 Dataset”. *Caltech Technical Report CNS-TR-2011-001*. 2011.
- P. Welinder, S. Branson, T. Mita, C. Wah, F. Schroff, S. Belongie, P. Perona. “Caltech-UCSD Birds 200”. *Caltech Technical Report CNS-TR-2010-001*. 2010.
- C. Wah, D. Lin, and T. S. Huang. “Anthropometric Human Hand Models for Tracking”. *Women in Machine Learning Workshop*, 2008.

HONORS

NSF Graduate Research Fellowship, 2010-2013
 NSF International Research and Education in Engineering (IREE) Award, 2010
 Powell Foundation Fellowship, UCSD, 2008
 CRA Outstanding Undergraduate Award, Honorable Mention, 2008
 Knight of St. Patrick, UIUC, 2008
 Marcia Peterman Memorial Award, 2008
 Senior 100 Honorary, UIUC, 2008
 Micron Technologies Scholarship, 2006-2007
 Ellery B. Paine Outstanding Junior Award, 2007

PROFESSIONAL
EXPERIENCE

Amazon A9.com, Palo Alto, CA
 Software Development Intern June 2011 to September 2011
 Visual Search

- Developed algorithm/prototype for **product search of visually similar items** using cameraphone image queries and aided by user input
- Co-inventor of patent “*Drawn Gesture Based Search to Identify Item*” (filed)

Intel Corporation, Hillsboro, OR
 Technical Undergraduate Intern May 2006 to August 2006
 Compatibility and Validation

- Evaluated digital media adapter software on Intel Viiv platforms

Intel Corporation, Hillsboro, OR
 Technical Undergraduate Intern June 2005 to August 2005
 Compatibility and Validation

- Evaluated third-party drivers on pre-beta builds of Windows Vista OS
- Received a KUDOS Award

SERVICE

Women in Computing Member, UCSD, 2008-present
 Eta Kappa Nu ECE Honor Society, UIUC, 2005–2007

- *President*, August 2006–May 2007

Women in Electrical and Computer Engineering, UIUC, 2005–2006

- *President*, August 2005–May 2006

ECE Student Advisory Committee, UIUC, 2005–2008

- *Chair*, August 2007–May 2008

IEEE Student Member, 2004–present

OTHER

U.S. Citizen