# CATHERINE WAH

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Information *Phone:* +1 (217) 377-5120

Professional Experience

### Google Inc., San Francisco, CA

10/2014-present

Staff Software Engineer

- Technical Lead/Manager (TLM), Apparel ML (2022–present): Leading an advanced research team focusing on ML-based image synthesis for apparel virtual try-on and fashion
- TLM, Natural Language Understanding for Assistant (2018–2021): Drove NLU launches on a new surface (Android Auto) for multiple locales
- Photos Machine Intelligence (2015–2018): Led end-to-end infra/algorithm design and implementation of "smart sharing" features in the Photos app; built dashboards to track metrics
- Photo Search (2014–2015): Developed ranking algorithms for Search features
- Filed 2 patents

Technical Lead, Google.org Software Engineering Fellow 9/2021–3/2022

• Led 9-person team in building a data platform solution for a non-profit organization, Benefits Data Trust, as part of a selective 6-month fellowship

# Google Inc., Venice, CA

Software Engineering Intern, Visual Search

6/2013-9/2013

• Worked on attribute-based visual classification of shopping images

### eBay Inc., San Jose, CA

Research Intern, eBay Research Lab

6/2012-9/2012

 Investigated visual retrieval of fine-grained clothing types and styles, resulting in an academic conference workshop presentation (CVPR 2013)

#### Amazon A9.com, Palo Alto, CA

Software Development Intern, Visual Search

6/2011-9/2011

- Prototyped an algorithm for mobile visual product search of visually similar items, aided by user input
- Filed patent "Drawn Gesture Based Search to Identify Item"

#### EDUCATION

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

PhD, Computer Science, June 2014 C.Phil, Computer Science, June 2012 M.S., Computer Science, December 2011

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

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

• Computer Science Minor, Mathematics Minor

### ACADEMIC EXPERIENCE

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

Graduate Student Researcher, advised by Serge Belongie 9/2008–6/2014

- Visipedia: Interactive visual recognition of fine-grained categories
- Published at top-tier computer vision conferences (see Google Scholar)
- Work has been cited 4000+ times
- Supported by NSF Graduate Research Fellowship and UCSD Powell Foundation Fellowship

# Toyota Technological Institute, Chicago, IL

Visiting Research Intern, hosted by Subhransu Maji 1–3/2014, 2–5/2013

- Investigated interactive visual recognition of fine-grained categories from similarity-based comparisons with multiple perceptual similarity metrics
- Awarded Best Paper: Vision and Learning at WACV 2015

# Electronic Engineering Dept., Chinese University of Hong Kong, Hong Kong Visiting Research Staff, hosted by Xiaogang Wang 6/2010–8/2010

• Supported by NSF International Research and Education in Engineering (IREE) Award

Skills Languages: C++, Java, Python

Environment: Linux/UNIX, MacOS

Other: MATLAB, SQL, JavaScript, HTML/CSS

Familiar with computer vision, machine learning, image processing topics

COMMUNITY Women in Machine Learning (WiML) Board of Directors (2022-2023)

 $\label{thm:committee} \mbox{Program Committee Member}, \mbox{\it Fine-Grained Visual Categorization (FGVC) Workshop}$ 

2013, 2015, 2017

Reviewer for computer vision/machine learning conferences and journals (2013–present),

including: NeurIPS, ICCV, IJCV, CVPR, ICLR, ECCV, BMVC, WACV

Mentorship: MAGIC (More Active Girls in Computing) (2015-2019), Lumiere high

school research program (2021-present)

Volunteering: 18 Reasons Kitchen, 826 Valencia, SFFILM, SF Marin Food Bank, The

Marine Mammal Center harbor seal crew

Other U.S. Citizen