Geneviève Patterson

CONTACT
INFORMATION

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EDUCATION **Brown University**, Providence, Rhode Island, USA

5th year PhD in Computer Science - expected graduation Fall 2015 **September 2010 − Present**
- Advisor: Assistant Professor James Hays, Dept. of Computer Science
- Current Research: Fine-grained object detection with humans in the loop.

The University of Tokyo, Hongo, Bunkyo-ku, Tokyo

Master of Electrical Engineering **October 2007 − September 2009**
- Advisor: Associate Professor Takafumi Koseki, Dept. of Electrical Eng. and Information Systems
- Dissertation Topic: Design and prototyping of a novel high-trust, low-speed transverse flux permanent magnet synchronous motor for application in electric ship propulsion. Sponsored by Hitachi Research Labs, Ibaraki-ken, Japan.

The University of Arizona, Tucson, Arizona, USA

BS Mathematics, BS Electrical Engineering (Hons) **August 2003 − May 2007**

PUBLICATIONS Patterson, G., C. Xu, H. Su, J. Hays, "The SUN Attribute Database: Beyond Categories for Deeper Scene Understanding," *International Journal of Computer Vision.* May 2014, Volume 108, Issue 1-2, pp 59-81.

Patterson, G., G. Van Horn, S. Belongie, P. Perona, J. Hays, "Bootstrapping Fine-Grained Classiers: Active Learning with a Crowd in the Loop," *NIPS 2013, Crowd workshop.* Lake Tahoe, NV USA. Dec 5-10, 2013.

Patterson, G. T. Lin, J. Hays, "Using Humans to Build Mid-Level Features," *CVPR 2013, Scene Understanding Workshop.* Portland, OR USA. June 25-27, 2013.

Xiao, J., J. Hays, B. Russell, G. Patterson, K. Ehinger, A. Torralba, A. Oliva, "Basic level scene understanding: categories, attributes and structures," *Frontiers in Psychology.* August 2013.

Patterson, G., J. Hays, "SUN attribute database: Discovering, annotating, and recognizing scene attributes,"*CVPR 2012.* Providence, RI USA. June 16-21, 2012.

Patterson, G., J. Hays, "Building a Taxonomy of Attributes for Fine-Grained Scene Understanding," *CVPR 2011, Fine Grained Computer Vision Workshop.* Colorado Springs, USA. June 20-25, 2011.

Patterson, G., T. Koseki, Y. Aoyama, K. Sako, "Simple Modeling and Prototype Experiments for a New High-Thrust, Low-Speed Permanent Magnet Disk Motor," *Proc. 12th International Conference on Electrical Machines and Systems*, Tokyo, Japan. Nov 2009.

Patterson, G., T. Koseki, "Fundamental Modeling for Optimal Design of Transverse Flux Motors," *The 2009 Annual Meeting of the IEE Japan*, Vol. 5, pp.17-18, Sapporo, Japan, March 2009.

Koseki, T., G. Patterson, T. Suzuki, "Visual State Feedback Digital Control of a Linear Synchronous Motor using Generic Video-Camera Signal," *Proc. 11th International Conference on Electrical Machines and Systems*, Wuhan, China. Oct 2008.

Lee K. S., Kim C. S., Kim R. K., Patterson G., Kolesik M., Moloney J. V., Peyghambarian N., "Dual-wavelength external cavity laser with a sampled grating formed in a silica PLC waveguide for terahertz beat signal generation," *Applied Physics B, Lasers and Optics*, Vol. 87 No. 2. April 2007.

PROFESSIONAL
EXPERIENCE

Clarifai, New York, New York, USA

Internship **December 2013 – February 2014**

Member of research and development team for new computer vision products.

IBM Corporation, Tucson, Arizona, USA

Software Developer, Internship **May 2005 – September 2007**

Developed graphical user interface and network statistics graphing software for IBM enterprise class servers.

HONOURS AND
AWARDS

Finalist - Facebook Graduate Research Fellowship 2013
National Defense Science and Engineering Graduate Fellowship 2010-2013
ICEMS 2009 Conference Award for Outstanding Paper and Technical Excellence
Japanese Ministry of Education Monbukagakusho Scholarship 2007 - 2009
University of Arizona President's Award for Excellence 2003-2007
University of Arizona Provost Scholarship 2003 - 2007
First Place, University of Arizona Freshman Engineering Design Competition, Dec 2003

COMMUNITY
ACTIVITIES

Faculty Graduate Liaison, Department of Computer Science, Brown University Jan 2014-Jan 2015
LDV Vision Summit 2014, 2015 Challenge Coordinator
GirlsGetMath 2014 (Brown University High school summer program) Instructor
Summer@Brown 2012 (Brown University High school summer program) Guest Lecturer
Brown University Artemis Program 2012, 2014 Guest Lecturer
MIT Splash Program 2010 Instructor, Topic: Trains in Japan
English Tutor, Nerima City Community English Club, Nerima-ku, Tokyo, Japan, 2008-2009
Math Tutor for Tucson Area ESL Junior High School Students, University of Arizona Future Mathematics Teachers Program, Tucson, AZ, August - December 2002
President, Eta Kappa Nu, Iota Xi Chapter, Engineering Honor Society 2006-2007

REFEREES

Available on request from:
- Assistant Professor James Hays (Brown University)
- Professor Serge Belongie (Cornell Tech)
- Professor Pietro Perona (Caltech)

PROGRAMMING

Python, Matlab, C++, Java, Javascript, LaTeX 2_ε, PSpice.

LANGUAGES

English (native), Spanish (fluent), Japanese (conversational).