

Joseph Tighe

External CV

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Education

2008-13

Ph.D. in Computer Science, *University of North Carolina at Chapel Hill*, Advisor: Dr. Svetlana Lazebnik.

Dissertation: Towards Open-Universe Image Parsing with Broad Coverage

2008-10

M.S. in Computer Science, *University of North Carolina at Chapel Hill*.

2000-04

B.S. in Computer Engineering, *San Jose State University, California*, Magna Cum Laude, GPA: 3.89.

- Dean's List for Engineering 2004
- Dean's scholar (2002-2004)
- Microsoft Scholarship 2000

Professional Experience

2013

Postdoctoral Research Associate, *University of North Carolina at Chapel Hill*.

- Continue research under the advisement of Svetlana Lazebnik on pushing scene understanding to larger scale datasets

2005-08

Computer Engineer (Member of Technical Staff), *Adobe System Incorporated*.

- Implemented features for Photoshop Elements 4/5/6/7 using C++
- Promoted January 2006
- Wrote state of the art image selection system in Flex/ActionScript for use on web
- Awarded a number of software patents
- Build Sheriff: Monitored the build system stats and fixed errors or build breakages that occurred
- Performed large merges of the Photoshop code base into the Element code base

Publications

Peer-reviewed Journal Publications

Jan. 2013

Joseph Tighe and Svetlana Lazebnik, *SuperParsing: Scalable Nonparametric Image Parsing with Superpixels*, *International Journal of Computer Vision*, Jan. 2013, Vol 101, I 2, pp 329-349.

Peer-reviewed Conference Publications

Jun. 2013

Joseph Tighe and Svetlana Lazebnik, *Finding Things: Image Parsing with Regions and Per-Exemplar Detectors*, *Conference on Computer Vision and Pattern Recognition*, 2013 (Oral).

Sep. 2012

Rahul Raguram, Joseph Tighe and Jan-Michael Frahm, *Improved Geometric Verification for Large Scale Landmark Image Collections*, British Machine Vision Conference, 2012 (Oral).

Nov. 2011

Joseph Tighe and Svetlana Lazebnik, *Understanding Scenes on Many Levels*, International Conference on Computer Vision, 2011.

Sep. 2010

Joseph Tighe and Svetlana Lazebnik, *SuperParsing: Scalable Nonparametric Image Parsing with Superpixels*, European Conference on Computer Vision, 2010.

Other Publications

May. 2013

Joseph Tighe and Svetlana Lazebnik, *Towards Open-Universe Image Parsing with Broad Coverage*, IAPR International Conference on Machine Vision Applications, 2013 (Invited Keynote given by Svetlana Lazebnik).

Jun. 2013

Joseph Tighe and Svetlana Lazebnik, *Finding Things: Image Parsing with Regions and Per-Exemplar Detectors*, CVPR Workshop, 2013.

Jun. 2013

Rahul Raguram, Joseph Tighe and Jan-Michael Frahm, *Improved Geometric Verification for Large Scale Landmark Image Collections*, CVPR Workshop, 2013.

Patents

2012

Joseph Tighe, Anmol Dhawan, Richard Coencas and Gregg D Wilensky, *Transforming representation information*, US Patent 8,271,893.

2010

Joseph Tighe, *Digital image drop zones and transformation interaction*, US Patent 7,751,652 and 7,974,496, WO Patent 2,008,036,191.

2009

Joseph Tighe, Anmol Dhawan, Richard Coencas and Gregg D Wilensky, *Mode-based graphical editing*, US Patent App. 12/351,760.

Teaching Activities

2010-13

Lecturer, *UNC at Chapel Hill*, Computer Vision Course.

- Taught as substitute for Svetlana Lazebnik and Jan-Michael Frahm when they were out of town
- Taught roughly 10 times

Fall 2007

Lecturer, *San Jose State University*, Intro to Engineering.

- Taught two sections of Introduction to Engineering with 70 students per section
- Course required lectures, grading of both technical assignments and essays, and organizing guest lectures

Internships

Summer 2004

Web Site Engineer, *Next G Wireless*, Sacramento, CA, Built website using ASP.NET, C# and MySQL.

Summer 2003

HP Grant Intern, *San Jose State University*, CA, Managed lab created from \$200,000 HP Grant.

Summer 2002

Power Management Product Engineer Intern, *Analog Devices*, San Jose, CA, Designed automated bench top test systems.

Summer 2000

Software Engineer Intern, *Xigo.com*, San Francisco, CA, Worked on stability of stock news server written in Java.