Alessandro Bergamo

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Amazon
Seattle, WA, USA

Experience

Amazon, Senior Research Scientist   **October 2016 – current**
Amazon Go, Seattle, WA

Amazon, Research Scientist   **September 2014 – October 2016**
Amazon Go, Seattle, WA

Google, Software Engineer Intern   **June 2013 – September 2013**
Visual Search Group, Mountain View, CA
Advisor: Dragomir Anguelov

Microsoft Research, Research intern   **June 2012 – September 2012**
Interactive Visual Media Group, MSR Redmond, WA
Advisor: Sudipta Sinha

Dartmouth College, Research assistant   **January 2010 – July 2010**
Computer Science Department, Hanover, NH

Education

Dartmouth College, Ph.D. in Computer Science   **September 2010 - September 2014**
Research area: Computer Vision and Machine Learning
Advisor: Prof. Lorenzo Torresani

University of Milan (Italy), M.S. in Computer Science   **September 2007 – August 2010**
GPA: 4/4 summa cum laude

University of Padua (Italy), B.S. in Computer Science   **September 2002 – September 2006**
GPA: 3.5/4

Skills

Languages: C, C++, Matlab, Python. Some experience with Java.

Software: GCC, Make, Linux; some experience in OpenGL, OpenCV, OpenMP , BLAS, Visual Studio, Photoshop.

Knowledge:
Computer Vision (Image and Object recognition, detection and search in large-scale dbs; Landmarks recognition).
Machine Learning (experience in Kernel methods, CNN, domain adaptation, regression, dim. reduction, others).

Software projects

vlg_extractor
Efficient implementation to extract the image descriptors proposed in *[Torresani et al., ECCV 2010]*,
[Bergamo et al., NIPS 2011] and *[Bergamo and Torresani, CVPR 2012]*. Written in C/C++ using OpenCV.
link: https://github.com/alebergamo/vlg_extractor

LIBLINEAR_bitmap
Enhancement of LIBLINEAR *[Fan et al. JMLR'08]* to efficiently support large-scale non-sparse binary data, parallel
learning, online b-Bit minwise hashing and polynomial kernel, and other features. Written in C++ and GCC.
link: https://github.com/alebergamo/LIBLINEAR_bitmap

Teaching Experience

Dartmouth College, Teaching Assistant for for CS174 (Machine Learning)   **January-March 2014**

Awards

Dartmouth College, Computer Science Research Symposium   **September 2010**
Best student paper award

Publications

Alessandro Bergamo, L. Bazzani, D. Anguelov, L. Torresani.
Self-taught object localization with deep networks.
Winter Conference on Applications of Computer Vision (WACV), 2016

Alessandro Bergamo, Lorenzo Torresani.
Classemes and Other Classifier-based Features for Efficient Object Categorization.
Transactions on Pattern Analysis and Machine Intelligence (TPAMI), March 2014

Krishnan Ramnath, Simon Baker, Lucy Vanderwende, Motaz El-Saban, Sudipta Sinha, Anitha Kannan, Noran Hassan, Michel Galley, Yi Yang, Deva Ramanan, Alessandro Bergamo, Lorenzo Torresani
AutoCaption: Automatic Caption Generation for Personal Photos.
Winter Conference on Applications of Computer Vision (WACV) 2014

Alessandro Bergamo, Sudipta N. Sinha, Lorenzo Torresani.
Leveraging Structure from Motion to Learn Discriminative Codebooks for Scalable Landmark Classification.
Computer Vision and Pattern Recognition (CVPR) 2013

Alessandro Bergamo, Lorenzo Torresani.
Meta-Class Features for Large-Scale Object Categorization on a Budget.
Computer Vision and Pattern Recognition (CVPR) 2012

Alessandro Bergamo, Lorenzo Torresani, Andrew Fitzgibbon.
PiCoDes: Learning a Compact Code for Novel-Category Recognition.
Neural Information Processing Systems (NIPS) 2011

Alessandro Bergamo, Lorenzo Torresani.
Learning Image Representations for Efficient Recognition of Novel Classes.
The learning workshop 2011

Alessandro Bergamo, Lorenzo Torresani.
Exploiting Weakly-labeled Web Images to Improve Object Classification: A Domain Adaptation Approach.
Neural Information Processing Systems (NIPS) 2010