# Thibaut Durand

PhD student in Computer Vision, LIP6, UPMC-Sorbonne Universités

# PhD thesis (since October 2013)

Title Semantic attributes and deep learning for the representation of visual data: application in image classification

Laboratoire d'Informatique de Paris 6, UPMC-Sorbonne Universités, France (DGA Grant)

Advisors Matthieu CORD, Nicolas THOME

Areas of Computer Vision, Machine Learning, Deep Learning, Weakly-Supervised Leaning, Latent (Strucinterest tural) SVM, Image representation, Object/part detectors

## Education

2012–2013 **M.Sc. in Image and Signal Processing degree**, *University of Cergy-Pontoise*, Cergy (95), France.

Master thesis: semantic pooling for image categorization using Multiple Kernel Learning

2010–2013 **Engineering degree**, *ENSEA*, Cergy (95), France, graduate school in electrical engineering, computer science and telecommunications.

Specialization: Multimedia Systems

# Experience

April-Sept Intern, Laboratoire d'Informatique de Paris 6, Paris, France.

2013 Semantic attributes for the representation of visual data: application in image classification

Summer 2012 Summer Intern, Laboratoire d'Informatique de Paris 6, Paris, France.

Image representations based on object detectors for object categorization

Summer 2011 **Summer Intern**, *ETIS*, Cergy (95), France.

Image representation for leaf recognition

#### Languages

French Native language

English Good knowledge

## Computer skills

Languages C/C++, Java, Scala, MATLAB, Lua

OS Windows, Linux, Mac

IDE Eclipse, NetBeans, IntelliJ Idea

Software suites Microsoft Office, Open Office

Library Torch7, MatconvNet, OpenCV, VLFeat, LIBSVM, LIBLINEAR, jKernelMachines,

Qt, Spark, MOSEK

Hardware FPGA (VHDL), microprocessor

## **Publications**

- [1] Thibaut Durand, Nicolas Thome, and Matthieu Cord. WELDON: Weakly Supervised Learning of Deep Convolutional Neural Networks. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016.
- [2] Thibaut Durand, Nicolas Thome, and Matthieu Cord. MANTRA: Minimum Maximum Latent Structural SVM for Image Classification and Ranking. In *IEEE International Conference on Computer Vision (ICCV)*, 2015.
- [3] Thibaut Durand, Nicolas Thome, Matthieu Cord, and David Picard. Incremental learning of latent structural sym for weakly supervised image classification. In *IEEE International Conference on Image Processing (ICIP)*, 2014.
- [4] Thibaut Durand, David Picard, Nicolas Thome, and Matthieu Cord. Semantic pooling for image categorization using multiple kernel learning. In *IEEE International Conference on Image Processing (ICIP)*, 2014.
- [5] Thibaut Durand, Nicolas Thome, Matthieu Cord, and Sandra Eliza Fontes de Avila. Image classification using object detectors. In 20th IEEE International Conference on Image Processing (ICIP), 2013.