# Alexis Zubiolo

## **Education**

University of Nice Sophia Antipolis – INRIA – I3S Laboratory

Nice, France

Ph.D. in Machine Learning

2012 - 2015 (expected)

Automatic classification of biological data using Machine Learning

National Polytechnic Institute of Toulouse – ENSEEIHT

Toulouse, France

M.Sc. and M.Eng. in Applied Mathematics and Computer Science

2009 - 2012

Specialization in applied mathematics and multimedia (image, video and signal processing)

Summer/Spring Schools.....

Paris. France

ENS/INRIA Visual Recognition and Machine Learning Summer School

July 2013

École de printemps "Nouvelles tendances en vision par ordinateur"

Cabrerets, France

CNRS Spring School in Computer Vision

École Normale Supérieure de Paris

May 2013

## **Professional Experience**

Research..

INRIA - I3S

Sophia Antipolis, France

Research Internship

March – September 2012

Classification of cells using multiclass Support Vector Machines and Kernel Methods

IRIT - ENSEEIHT

Toulouse, France

Engineering School Project

January – March 2012

Team leader of a research project in 3D Building reconstruction using Graph Cuts

IRIT

**Toulouse, France** *July – September 2011* 

Research Internship

Automatic lip-reading project using Active Shape Models

Teaching.....

## **University of Nice-Sophia Antipolis**

Teaching Assistant (66 hours)

Nice, France 2014 – 2015

- Introduction to Computer Science (18 hours)
- Web programming (48 hours)

## **University of Nice-Sophia Antipolis**

Nice, France

Teaching Assistant (66 hours)

2013 - 2014

- Introduction to Computer Science (36 hours)
- Web Programming (12 hours)
- Object-Oriented Programming with Python (18 hours)

#### University of Nice-Sophia Antipolis - Polytech Nice-Sophia

Nice - Sophia Antipolis, France

Teaching Assistant (73 hours)

2012 - 2013

- Introduction to Computer Science (21 hours)
- Operating Systems (42 hours)
- Image Processing (10 hours)

### **Skills**

Mathematics: Machine Learning, Statistics, Data Mining, Optimization, Graph Theory, Image and Video

Processing, Computer Vision

**Programming**: Matlab, Python, C/C++, R, Shell, LATEX

Operating Systems: UNIX, Microsoft Windows

Multidisciplinary: Extended experience interacting with people from a variety of fields (e.g. Biologists

and Medical Doctors)

## Languages

French: Fluent Native speaker

English: Fluent
Spanish: Advanced

Russian: Beginner Started learning the language in January 2014

### **Publications**

#### Conferences.

 Alexis Zubiolo, Barbara André, Éric Debreuve and Grégoire Malandain: A Recursive Approach For Multiclass Support Vector Machine: Application to Automatic Classification of Endomicroscopic Videos. International Conference on Computer Vision Theory and Applications (VISAPP), Lisbon, Portugal, 2014

- Alexis Zubiolo, Kawssar Harb, Michèle Studer, Éric Debreuve, Xavier Descombes Morphological Analysis and Feature Extraction of Neurons from Mouse Cortices Multiscale 3D Microscopic Images. International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Milano, Italy, 2015
- Alexis Zubiolo, Kawssar Harb, Michèle Studer, Éric Debreuve, Xavier Descombes: Comment Retrouver une Constellation dans la Galaxie? Colloque GRETSI, Lyon, France, 2015

### Workshops..

- Alexis Zubiolo, Kawssar Harb, Nikita Lukianets, Franck Grammont, Michèle Studer, Éric Debreuve and Xavier Descombes: Towards Neuron Classification From 3D Confocal Microscopic Images. SIGNALIFE Workshop on Cell Signaling, Nice, France, 2014
- Christian Alfano, Kawssar Harb, Elia Magrinelli, Nikita Lukianets, Alexis Zubiolo, Celine Nicolas, Éric Debreuve, Guillaume Sandoz, Xavier Descombes, Franck Grammont and Michèle Studer: Concomitant expression of subcerebral- and callosal-specific genes defines a deep layer cell population in the postnatal mouse neocortex. Society for Neuroscience, Washington DC., USA, 2014

## Miscellaneous

**Sports**: Gymnastics, Hiking and Rugby **Travels**: Europe and Latin America

Reading: French, English and Spanish literature