# GuillaumeTHIBAULT Ph.D

#### Research Assistant Professor

## **Summary**

Ph.D degree in Image Processing and Pattern Recognition from Aix-Marseille II University, France, with 13-year experience in Computer Vision / Machine Learning and Software Engineering in universities. Strong background in Computer Science and Programming. Skilled at presenting theoretical and technical concepts.

#### Skills

Scientific Computer Vision, Machine/Deep Learning (Classification and Clustering).

Strong knowledge in Mathematics and Computer Science, background in Physics.

Programming Languages

Languages: Java, Python, C/C++.

Libraries: Keras, PyTorch, Weka, JSAT, ImageJ.

Languages English fluent (work in the US since 2013), French native.

## **Experience**

01/2013-Now OHSU Center for Spatial Systems Biomedicine (OCSSB), BME Portland, OR

- Computer Vision / Machine Learning / Deep Learning / Computer Aided Diagnosis Researcher.
- Developing algorithms to segment, analyze and classify H&E images (Java, Python, Keras).
- Segmentation and quantification of immunofluorescence images (Java, C++).
- MRI analysis for early chemotherapy outcome prediction.
- Registration, denoising and segmentation of electron microscopy images (PyTorch).
- Teaching, DAC committees member, Ph.D and Master dissertation advisor.

10/2009-09/2012 Center for Mathematical Morphology (CMM), Mines-ParisTech Fontainebleau, France

- Post Doctoral Researcher in pattern recognition.
- Using texture characterization and machine learning for mitosis classification (Java, Python, JMP).
- Blood vessel detection for TeleOphta telemedicine network.
- Xiwei Zhang Ph.D advisor in image processing and machine learning.

10/2005-09/2009 Laboratoire des Sciences de l'Information et des Systèmes (LSIS), Aix-Marseille II University Marseille, France

- Ph.D student in image processing, machine learning, and pattern recognition.
- Characterization and classification of cells from patients with Progeria (C, Java, Weka, JMP).
- Teaching: C, Maple, mathematics, image processing, mathematical morphology, pattern recognition.

1997-2012 **SDIS 13** Aubagne, France

Volunteer Firefighter and Paramedic.

2007 **SDIS 13** Aubagne, France

• Lead software engineer in database (Access, Merise).

• Implemented a complete database to manage the forest fire prevention resources for the SDIS 13 firefighters.

2003 CarMask Marseille, France

- Software engineer in automation (Visual basic).
- Controller implementation with algorithmic optimization for paper cutting in automotive industry.

### **Education**

2009	Ph.D degree, Luminy, Aix-Marseille II University	Marseille, France
	Image Processing, Shape and Texture Characterization, and Machine Learning	
2005	Masters of Science, Aix-Marseille University	Marseille, France

Numerical Imaging, Signal Processing, Information Processing and Modeling.

2003 **Bachelor degree** Marseille, France

Majoring in Mathematics, Computer Science, and Physics.