

# Fabien Baradel

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Ph.D. Candidate, INSA-Lyon  
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## Research Interests

Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning

## Education

**INSA-Lyon** Lyon, France October 2016 - Present  
Ph.D., Computer Science  
– Thesis: *Deep Learning for Human Understanding: poses, gestures, activities*  
– Supervisors: Christian Wolf - Julien Mille

**ENSAI** Rennes, France September 2013 - June 2016  
M.Sc, Statistics & Computer Science  
– Suma Cum Laude (top of class) - High Honors  
– "Diplôme d'ingénieur" from the National School of Statistics and Data Analysis  
– Top French engineering school in Data Science

**University of Warwick** Coventry, UK January 2015 - June 2015  
M.Sc, Statistics  
– Erasmus Mundus semester exchange

**University of Paris Dauphine** Paris, France January 2015 - June 2015  
B.Sc, Applied Economics  
– Double agreement with ENSAI

**University of Grenoble Alps** Grenoble, France September 2010 - June 2013  
B.Sc, Applied Mathematics  
– Suma Cum Laude (top of class) - High Honors

## Work Experience

**University of Guelph** Guelph, Canada July 2017 - August 2017  
Visiting researcher  
– *Machine Learning Research Group*  
– Collaboration from the DeepVision project  
– Advisor: Graham Taylor

**LIRIS** Lyon, France October 2016 - Present  
Graduate Research Assistant  
– *Lyon computer science lab*  
– Research on computer vision and machine learning with a focus on human activity recognition, multi-modality fusion, video understanding  
– Involved in robotic projects  
– Advisor: Christian Wolf

**XRCE**                      Grenoble, France                      March 2016 - September 2016  
Research Intern

- *Xerox Research Centre Europe*
- Subject: *Unsupervised domain adaptation for image recognition*
- One paper under review & one U.S. Patent accepted
- Advisors: Boris Chidlovski - Gabriela Csurka

**LICIT - IFSTTAR**                      Lyon, France                      June 2015 - August 2015  
Research Intern

- Subject: *Machine Learning for road traffic forecasting*
- Advisor: Romain Billot

## Publications

1. Fabien Baradel, Christian Wolf, Julien Mille. "Pose-conditioned Spatio-Temporal Attention for Human Action Recognition" *under review, arXiv pre-print*. 2017.
  - State-of-the-art results on NTU RGB+D dataset (largest dataset for human action recognition)
  - Transfer Learning on tiny datasets (state-of-the-art results on SBU Kinect Interaction dataset)

## Teaching Experience

**ENSAI**                      Rennes, France                      January 2017  
Teaching Assistant

- Seminars: *Introduction to Deep Learning with Tensorflow*

## Awards and Honors

ANR/NSERC Ph.D. Fellowship - DeepVision project  
Erasmus Mundus exchange program scholarship

## Computer Skills

Python, Java, C, C++, SQL, PHP, R, SAS  
Tensorflow, pyTorch, L<sup>A</sup>T<sub>E</sub>X, Linux, Mac, HTML, CSS