# Gabriele Abbati

BIRTH: Italy | 10 February 1991

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## **EDUCATION**

PRESENT D.Phil. (Ph.D.) in Machine Learning, UNIVERSITY OF OXFORD, Oxford (UK)

Supervisor: M. A Osborne, Machine Learning Research Group Funded by Oxford - Google DeepMind Graduate Scholarship

2016 M.Sc. in Computational Science and Engineering, ETH ZÜRICH, Zürich (CH)

Major: Computational Physics, GPA: 5.6/6

Master Thesis: "Feature Selection in Medical IT: Surgery Prediction for Spinal Stenosis" Supervisors: Prof. J. Buhmann (Information Science and Engineering, ETH Zürich), Prof. J. Steurer (Horten Center, UZH)

2013 B.Eng. in Mathematical Engineering, Politecnico di Milano, Milano (IT)

Final Grade: 110/110

## **WORK EXPERIENCE**

2015 **Computational Science Intern**, SWISS NATIONAL SUPERCOMPUTING CENTER (CSCS), Lugano (CH) (3 months). *Supervisor*: C. Gheller (CSCS).

2014 Teaching Assistant (Stochastics), ETH ZÜRICH, Zürich (CH)

#### **PUBLICATIONS**

Abbati, G., Bauer, S., Winklhofer, S., Schüffler, P., Held, U., Burgstaller, J., Steurer, J. & Buhmann, J., MRI-based Surgical Planning for Lumbar Spinal Stenosis. (Under Review)

Verma, S., Abbati, G., Novati, G., & Koumoutsakos, P. "Computing the force distribution on the surface of complex, deforming geometries using vortex methods and Brinkman penalization". *ArXiv Preprint, arXiv:1610.04398* (https://arxiv.org/abs/1610.04398v1).

# COMPUTER SKILLS

- Fluent with C/C++, Fortran with parallel computing APIs such as OpenMP, POSIX threads, MPI, CUDA, AVX/SSE and OpenACC
- Object-oriented programming
- ETEX document editing

- Fluent with **Python** and **machine learning** packages (*scikit-learn*, *TensorFlow*)
- Bash scripting
- Able to use Linux, Mac OS X and Windows operating systems

#### LANGUAGES

Italian: Mother Tongue English: Fluent French: Limited Working Proficiency

# LIFE SKILLS & HOBBIES

Sports: played tennis and golf for several years, grew recent interest in snowboarding

and rock climbing

Societies: OUABC (Oxford University Amateur Boxing Club), Full Blue

OUMC (Oxford University Mountaineering Club)

The Oxford Union

Hobbies: played modern and classical guitar since I was young, passionate about several

forms of art (literature, modern painting)