Gabriele Abbati

ADDRESS: 24 Wharf House, Juxon Street,

OX2 6DU, Oxford, UK

PHONE: +44 7802 356035 (primary)

+39 347 389 08 27 (secondary)

EMAIL: gabb@robots.ox.ac.uk

HOME PAGE: http://www.robots.ox.ac.uk/~gabb/

EDUCATION

PRESENT D.Phil. (Ph.D.) in Engineering Science, 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, Final GPA: 5.6/6

2013 B.Eng. in Mathematical Engineering, POLITECNICO DI MILANO, Milano (IT)

Final Grade: 110/110

Work Experience

2017 Machine Learning Research Intern, MIND FOUNDRY, Oxford (UK)

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

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

PUBLICATIONS

Abbati, G., Tosi, A., Osborne, M.A. & Flaxman, S., "AdaGeo: Adaptive Geometric Learning for Optimization and Sampling". In *Proceedings of the 21st International Conference on Artificial Intelligence and Statistics (AISTATS), to appear.*

2017 **Abbati**, **G.**, Bauer, S., Winklhofer, S., Schüffler, P., Held, U., Burgstaller, J., Steurer, J. & Buhmann, J., "MRI-based Surgical Planning for Lumbar Spinal Stenosis". In *Medical Image Computing and Computer-Assisted Intervention (MICCAI) 2017: 20th International Conference, Proceedings, Part III (pp. 116–124).*

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". In *International Journal for Numerical Methods in Fluids*.

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
- Software **versioning** (*git*, subversion)
- Fluent with **Python** and **machine learning** packages (*scikit-learn*, *TensorFlow*, *Keras*, etc.)
- 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: • Oxford University Amateur Boxing Club (OUABC):

- 2016-2017: Full Blue Athlete

- 2017-2018: President

• Oxford University Mountaineering Club (OUMC)

• The Oxford Union (Debating Society)

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

forms of art (literature, modern painting)