

# Matt Graham

Machine learning PhD student at University of Edinburgh

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## Education

- 09/2013 – PhD in Informatics, University of Edinburgh  
Supervisor: Amos Storkey, Project: Auxiliary variable MCMC methods
- 09/2012 – 09/2013 MSc by Research in Neuroinformatics, University of Edinburgh  
Result: Distinction, Project: Insect olfactory landmark navigation
- 10/2008 – 06/2012 MEng in Information and Computer Engineering, University of Cambridge  
Result: First-class Honours / Distinction, Project: Measuring tissue stiffness with ultrasound

## Experience

- 12/2014 – Consultant, Ellative  
Part-time consulting for machine learning start-up.
- 01/2014 – Teaching support, School of Informatics, University of Edinburgh  
Teaching roles for undergraduate and masters level courses (details below).
- 07/2011 – 09/2011 Undergraduate research assistant, Engineering Department, University of Cambridge  
Summer research project, exploring use of technology in supporting mental health care.
- 07/2010 – 09/2010 Junior software engineer, Granta Design, Cambridge  
Summer internship at materials information software firm.
- 07/2009 – 08/2009 Educational resource development, NRIC, Cambridge  
Summer internship with educational charity.
- 08/2007 – 08/2008 Engineering assistant, Mott MacDonald, Newcastle  
Year in Industry placement in regional office of civil engineering and development consultancy.

## Conference

- (04/2017) Asymptotically exact inference in differentiable generative models  
**Matthew M. Graham** and Amos J. Storkey  
To appear in: *Proceedings of the 20th International Conference on Artificial Intelligence and Statistics*
- 05/2016 Pseudo-Marginal Slice Sampling  
Iain Murray and **Matthew M. Graham**  
*Proceedings of the 19th International Conference on Artificial Intelligence and Statistics*

## Workshop

- 12/2016 Continuously tempered Hamiltonian Monte Carlo  
**Matthew M. Graham** and Amos J. Storkey  
*Advances in Approximate Bayesian Inference workshop, Neural Information Processing Systems*

## Software

- 05/2016 Theano: A Python framework for fast computation of mathematical expressions  
Theano Development Team

## Teaching

School of Informatics, University of Edinburgh

09/2016 –	Teaching assistant, Machine Learning Practical
09/2016 – 11/2016	Tutor, Machine Learning and Pattern Recognition
01/2016 – 04/2016	Teaching assistant, Probabilistic Modelling and Reasoning
09/2015 – 01/2016	Demonstrator, Machine Learning Practical
11/2015 – 12/2016	Marker, Machine Learning and Pattern Recognition
09/2015 – 12/2015	Tutor, Information Theory
01/2014 – 03/2016	Tutor, Probabilistic Modelling and Reasoning

## Outreach

07/2015 – 05/2016	Volunteer tutor, Queensferry High School, Queensferry One-to-one tutoring in applied mathematics through STEM Ambassadors scheme.
01/2010 – 03/2011	School placements, STIMULUS, Cambridge Placements at two local secondary schools in Cambridge assisting in teaching of STEM subjects.
10/2008 – 06/2012	Outreach volunteer, Cambridge University Engineering Department Assisting in workshops aimed at encouraging young people to consider engineering careers.

## Awards and scholarships

12/2016	Advances in Approximate Bayesian Inference workshop (NIPS 2016), Disney Research Paper Award
05/2015	Scottish Informatics and Computer Science Alliance (SICSA), Summer School Bursary
09/2012	University of Edinburgh, Neuroinformatics Doctoral Training Centre Scholarship (4 years)
2010-2012	University of Cambridge, Jesus College, Scholarships (Engineering Part IB/IIA/IIB)

## Computing

Languages	Python (expert), C (proficient), MATLAB (proficient), Javascript (proficient), C# (prior experience)
Frameworks	NumPy, SciPy, Theano, TensorFlow
Workflow	Git, Bash, Jupyter notebooks
Markup	Markdown, LaTeX, HTML

## Courses

08/2016	Mountain Leader Award (summer) training, Mountain Training UK
11/2015	Outdoors Emergency First Aid, British Association of Ski Patrollers
10/2015 – 11/2015	Scientific Computing, Edinburgh Parallel Computing Centre, University of Edinburgh
08/2015 – 09/2015	Machine Learning Summer School, Kyoto University
01/2014 – 03/2014	Beginners Chinese (1.2), Confucius Institute for Scotland, University of Edinburgh
09/2013 – 11/2013	Beginners Chinese (1.1), Confucius Institute for Scotland, University of Edinburgh
10/2010 – 03/2011	Intermediate German (3), Language Unit, Cambridge University Engineering Department
10/2009 – 03/2010	Intermediate German (2), Language Unit, Cambridge University Engineering Department