Matt Graham Research Associate at Newcastle University & the Alan Turing Institute

Education

09/2013 – 09/2017 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

03/2020 – Research Associate, School of Mathematics, Statistics and Physics, Newcastle University

Postdoctoral research position with Chris Oates.

11/2017 – 03/2020 Research Fellow, Dept. of Statistics & Applied Probability, National University of Singapore

Postdoctoral research position with Alexandre Thiery.

07/2010 – 09/2010 Junior software engineer, Granta Design, Cambridge

Summer internship at materials information software firm.

07/2009 – 08/2009 Educational resource development, NRICH, 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.

Publications

Journal

12/2017 Asymptotically exact inference in differentiable generative models

Matthew M. Graham and Amos J. Storkey

Electronic Journal of Statistics

Conference

08/2017 Continuously tempered Hamiltonian Monte Carlo

Matthew M. Graham and Amos J. Storkey

 $Proceedings\ of\ the\ 33rd\ Conference\ on\ Uncertainty\ in\ Artificial\ Intelligence$

04/2017 Asymptotically exact inference in differentiable generative models

Matthew M. Graham and Amos J. Storkey

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

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 - 04/2017	Teaching assistant, Machine Learning Practical
09/2016 - 12/2016	Tutor, Machine Learning and Pattern Recognition
01/2016 - 04/2016	Tutor & teaching assistant, Probabilistic Modelling and Reasoning
11/2015 - 12/2015	Marker, Machine Learning and Pattern Recognition
09/2015 - 01/2016	Demonstrator, Machine Learning Practical
01/2015 - 04/2015	Tutor, Probabilistic Modelling and Reasoning
11/2014 - 12/2014	Marker, Machine Learning and Pattern Recognition
09/2014 - 12/2014	Tutor, Information Theory
01/2014 - 04/2014	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, Disney Research Paper Award
05/2015	Scottish Informatics and Computer Science Alliance, Summer School Bursary
09/2012	University of Edinburgh, Neuroinformatics Doctoral Training Centre Scholarship
2010-2012	University of Cambridge, Jesus College, Scholarships (Engineering Part IB/IIA/IIB)

Computing

Languages	Python (expert),	C (proficient).	MATLAB	(proficient)
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Frameworks NumPy, SciPy, JAX, FEniCS Workflow Git, Bash, Jupyter notebooks Markup LaTeX, Markdown, 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