Damon McDougall

Personal Data

Citizenship:	UK Citizen
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Education

Oct 2012 — Ph.D. in Mathematics, University of Warwick, Coventry
Topic: Data Assimilation
Advisors: Prof. A M Stuart, Prof. C K R T Jones

Jul 2008 — MMath in Mathematics, University of Warwick, Coventry
1st Class Honors
Thesis: "Numerical Solution of the 2D Euler Equations"
Adviser: D Barkley

Sep 2004 — A Levels, Tuxford Comprehensive, Nottinghamshire
A Level Mathematics: A
A Level Physics: A
A Level Chemistry: B
AS Level Further Mathematics: A

Employment

2012–Present — Postdoc at ICES, University of Texas at Austin, Austin, Texas
Predictive Engineering and Computational Science
Quanitfying uncertainty in partial differential equations

2010–2011 — Lecturer at University of Warwick, Coventry
Lectured a two-part 20 week C++ course for 50 Financial Mathematics MSc students, centred on numerical methods. Wrote and marked a C++ project.

2008–2010 — TA at University of Warwick, Coventry
Taught Java to 150 first and second year undergraduate Mathematicians. Marked their homework.

2007–2008 — Supervisor at University of Warwick, Coventry
Supervised two groups of four first year undergraduate Mathematics students. Met each group for an hour twice a week to provide one-to-one feedback on homework and go through difficult course material.

Jul–Sep 2007 — Business Analyst Intern at JPMorgan Chase & Co., London
Worked in investment banking technology as part of a rapid application development team. I documented and streamlined their entire application development cycle over the course of a ten week Summer internship.

Publications

W. Lee, D. McDougall and A. M. Stuart (2011). *Kalman filtering and smoothing for linear wave equations with model error*. Inverse Problems **27** (9), 095008.

D. McDougall and C. K. R. T Jones (2014). *Variance reduction for controlled ocean gliders*. In preparation.

R. O. Moore and D. McDougall (2014). *A posteriori controlled ocean gliders for a testbed model*. In preparation.

O. Zielke, D. McDougall, I. Babuska and C. Simmons (2014). *Bayesian near real-time earthquake source inversion*. In preparation.

Skills and Interests

Basic Knowledge:	Javascript, HTML, CSS, Spanish, Fortran
Intermediate Knowledge:	Office, Linux, Ubuntu, C++, Java, Objective-C, svn
Expert Knowledge:	C, Python, git, Mac OS X, LaTeX, Electric guitar

Awards and achievements

2012	**Warwick SIAM Student Chapter at University of Warwick, Coventry** Founded the Warwick SIAM Student Chapter.
2010	**ASSEC** Travel: ca. £500
2008–2012	**NERC & EPSRC** Ph.D funding: ca. £13,000 p.a.

Recent Talks and Posters

Date	Place	Event	Title
8/04/2014	KAUST	CES Seminar	Bayesian parameter estimation with an application to earthquake rupture constraints
24/07/2013	Raleigh Convention Centre	USNCCM12	Infinite Dimensional UQ in Model Inadequacy for a Convection-Diffusion Model Problem
21/05/2013	Snowbird Ski Resort	SIAM Conference on Applications of Dynamical Systems	Optimal Control in Lagrangian Data Assimilation
25/04/2013	ICES	Seminar	An introduction to git and GitHub
13/04/2013	Purdue University	Workshop on Inverse Problems in Scattering and Imaging	UQ for Lagrangian Data Assimilation
18/07/2011	Vancouver Convention Center	ICIAM 2011	Data Assimilation for the transport equation
04/04/2011	University of North Carolina at Chapel Hill	GMA seminar	MCMC and Lagrangian Data Assimilation
09/02/2011	University of Oxford	4th Annual Oxford SIAM Student Chapter	Data Assimilation for the transport equation
07/01/2011	University of Manchester	SIAM UKIE Meeting	Data Assimilation for the transport equation