

# Jack Shotton

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## CONTACT INFORMATION

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## EDUCATION

### Imperial College, London

*PhD in Mathematics*

**October 2011 –**

- Supervised by Professor Toby Gee.
- Expected submission date: March 2015.

### Trinity College, Cambridge University

*MMath (Part III of the Mathematical Tripos)*

**October 2010 – June 2011**

- Passed with Distinction.

*BA in Mathematics*

**October 2007 – June 2010**

- Graduated with first class honours in June 2011.
- Placed fifth in year.

### Portsmouth Grammar School

**September 2000 – June 2007**

## PREPRINTS AND PUBLICATIONS

‘Local deformation rings and a Breuil–Mézard conjecture when  $l \neq p$ .’, <http://arxiv.org/abs/1309.1600>, preprint, submitted

‘The Breuil–Mézard conjecture when  $l \neq p$ .’, in preparation

## EMPLOYMENT

### University of Cambridge

*Summer Research Student*

**July – September 2009**

Ten-week project on the representation theory of  $S_n$ , supervised by Dr. Stuart Martin.

### Government Communications Headquarters (GCHQ)

*Summer Student Mathematician*

**July – August 2010**

A two-month project working in a group of 10 mathematics students on classified problems.

### Softwire

*Intern Developer*

**August – October 2011**

Developed in SQL, Ruby and C#. Worked in small teams on a commercial website and on an internal management application.

AWARDS	<b>Cecil King Travel Scholarship</b>	<b>September 2014 – December 2014</b>
	Scholarship worth £5000 to visit Professor Emerton at the University of Chicago.	
TEACHING	<b>International Mathematical Olympiad</b>	<b>2005 – 2007</b>
	Bronze, silver and gold medals in 2005, 2006 and 2007 competitions respectively.	
	<b>UK Maths Trust</b>	
	<i>Deputy Leader, UK IMO team</i>	<b>October 2010 – July 2012</b>
	Helped train and look after a team of six students at the 2011 and 2012 International Mathematical Olympiads.	
	<i>Volunteer</i>	<b>October 2007 – present</b>
	Took sessions at and helped organise various training camps. Mentored schoolstudents by correspondence. Set and marked national maths competitions.	
	<b>University of Cambridge</b>	
	<i>STEP student mentor</i>	<b>March 2008</b>
	Taught a class of around 10 high-school students in a week long course aimed at helping students from state schools pass the Cambridge entry exams (STEP).	
	<i>Supervisor</i>	<b>2011–2012</b>
	Supervised groups of between one and three undergraduates in first year Numbers and Sets and third year Number Fields.	
	<b>Imperial College, London</b>	
	<i>Graduate Teaching Assistant</i>	<b>October 2012 –</b>
	Marked tests for various courses. Ran weekly problems classes. Designed and ran introductory session for entire first year.	
TALKS	‘The Brauer–Manin obstruction for some conic bundles’, student seminar, November 2014	
	‘Counting lattice points in regions with cusps’, study group, March 2014	
	‘Adic spaces’, study group, February 2014	
	‘The Tate Conjecture’, study group, October 2013	
	‘The Breuil–Mézard conjecture’, TCC event day, Bristol, May 2013	
	‘Deformation theory of Galois representations’, Deformation Week in Oxford, April 2012	
	‘Rigid analytic function rings’, study group, April 2012	
	‘Hecke algebras’, study group, April 2012	
	‘Local deformation rings for $l \neq p$ ’, study group, November 2012	
	‘The local Langlands correspondence for $GL(n)$ ’, study group, October 2012	
	‘ $p$ -adic $\zeta$ -functions’, study group, March 2012	
	‘Eisenstein Series for Hilbert Modular Forms’, study group, October 2011	