# Christopher Daniels

#### Contact

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### **Technical skills**

MS Word MS Access MS Excel LaTeX (typesetting system)

## **Programming**

Basic skills R (particular focus on data visualization), Python, Java

## **Personal Statement**

As an undergraduate I obtained reliably good marks over my time at university while taking over 110% of the expected course load, demonstrating a drive to succeed above and beyond the constraints of the qualification and a passion for learning. I simultaneously served as treasurer for a large and highly active society, the Science Fiction and Fantasy Society, where we arranged a large increase in society activities.

I have long wanted my work to have an impact; as such during university holidays I found my first job volunteering for the British Red Cross, where I worked as the sole public-facing member of the shop staff during my shifts.

Since moving on from my undergraduate degree I secured funding from the EPSRC for a PhD in statistics. While performing my research, I also worked with a great many first year students as a tutor to ease them into university level mathematics, probability, and statistics; not only new mathematics intake, but also a handful of students from other sciences as needed.

I enjoy programming simple applications for probability estimation, data processing and data visualizations, and in my spare time work to improve my skills in these areas.

# **Education**

1997-2003

2011-2016	PhD of Statistics University of Bath
	On The Phase Transition In Certain Percolation Models.
2005-2010	MMath Mathematics (1st)  University of Warwick
	Awarded Mathematics Institute 2nd year Mathematics Prize for outstanding academic achievement.
2003–2005	<b>A-Level</b> : Mathematics (A), Further Mathematics (A), Physics (A), Computing (A) <b>AS-level</b> : Mathematics (A), Further Mathematics (A), Physics (A), Computing (A), Chemistry (A)  Peter Symonds College, Winchester, Hants

GCSEs

A\*: Mathematics, Statistics, Triple Sciences, English, French, Electronics

**A**: History, German

C: Drama, English Media Mountbatten School, Romsey, Hants

# **Experience**

## 2011–2016 University of Bath PhD Student

Rath

I researched the field of percolation, with a focus on certain continuum and discrete models with long range dependencies. My key tasks included literature searching, analysis of existing results in the field, and improvements upon the existing knowledge. Finally, I produced a summary of the current state of knowledge in a section of the field, to best know where to look for improvements.

**Oral Presentation** New Frontiers in Random Geometric Graphs (Workshop at the Lorentz Center) Presented a result forming part of my thesis.

#### 2012–2015 **University of Bath** *Undergraduate Tutor*

Bath

Tutored groups of 1<sup>st</sup> year students in various courses (Algebra 1, Analysis 1, Probability 1A, Probability 1B), leading weekly classes to review work and provide necessary clarification and alternative explanations to ease understanding. For Probability 1B, classes were every other week, with lab sessions every other week to aid the students with learning to use R for statistical analysis. Generally leading 2 groups each semester, of around 16 students each.

Additionally marked work for these groups, and provided feedback.

#### 2007–2009 **British Red Cross Shop** *Volunteer*

Romsey

Manned the shop, including being sole point of sale operator, helping customers, accepting donations, keeping stock in order, and assisting with weekly culling of unwanted stock.

Position was during university holidays as an undergraduate.

# **Interpersonal Skills**

- Having taken over society accounts carrying a large debt of approximately £500, I rapidly began examining similar societies, and quickly determined a plan of action to recover.
- As a key member of the executive of a large society I played an important role in attracting new members each year and helping them integrate into the society as a whole, improving my ability to build rapport.
- As a bell ringer and having been on several guild outings, I have had experience socialising with large groups.
- Also as a bell ringer I have over the years increased my capacity to concentrate hard on a specific task for reasonable lengths of time, while maintaining coordination with the rest of the group.
- Spending time running role-playing games for groups of 4-5 people, I have learned how to organise small groups to arrange times for meetings, and to quickly adapt to counter unforseen circumstances.
- While running role-playing games the players will frequently abort their planned courses of actions and do something completely out of left field. As such I have needed to develop the ability to rapidly adapt existing plans for new situations.

# **References**

#### **Professor Mathew Penrose**

Dept. of Mathematical Sciences University of Bath Bath BA2 7AY PhD supervisor

#### **Alison Penman**

c/o British Red Cross Shop 18 The Hundred Romsey SO51 8BW Assistant Manager