JAMES CAMPBELL

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github.com/theref

PERSONAL PROFILE

I am an undergraduate mathematics student currently seeking a post graduate position in applied mathematics. I have undertaken mathematical research throughout my undergraduate career, mainly focusing on the area of Game Theory, with a small contribution made to the area of Alternating Sign Matrices. I have also spent a year working at one of the UK's largest Insurance companies applying my analytical skills within an industrial environment.

Since my first undergraduate year, I have been awarded a mathematics scholarship, presented my work at an international conference and twice been selected from 160 of my peers to undertake a research internship during the summer break.

WORK EXPERIENCE, RESEARCH AND PUBLICATIONS

SEPT. 2016 - MAY 2017	**Final Year Project** Investigated "Fingerprinting prisoners Dilemma strategies"
AUTUMN SEMESTER 2016	**Tutoring of 1st Year Students Studying 'Computing for Mathematics'**
SUMMER 2016	**Designed and Built Playgrounds for Schools in Indonesia, CAUKIN** `http://www.caukinstudio.com/`
SEPT. 2015 - JULY. 2016	**Pricing Analyst at Admiral Group PLC**
SUMMER 2015	**Research Internship, Cardiff University School of Mathematics** Investigated "The expected wait in a tandem queue with blocking with a game theoretic study of the Hospital EMV interface."
AUTUMN SEMESTER 2014	**Tutoring of 1st Year Students Studying 'Computing for Mathematics'** As above
SUMMER 2014	**Research Internship, Cardiff University School of Mathematics** Employed for the Summer to lead a project developing Game Theoretic algorithms within the open source mathematics package, Sage. Areas of Game Theory included: Normal Form Games, Co-operative Games and Matching Games. The code produced is available at `https://github.com/theref/sage-game-theory`
SPRING SEMESTER 2014	**Development of a Django Web Application** During an 11 week assessed activity of my Computing for Mathematics module, I developed a dynamic web application using the Django framework. The application can be viewed at `http://thefightclub.herokuapp.com` and the code is available at `https://github.com/Fight-Club/fightclub`
SEPT. 2013 - CURRENT	**Adult Leader at 1st Helsby Scouts** Continued to develop communication skills whilst helping to supervise and teach children aged 10 - 16 years. Currently organising and managing a 2 week international expedition that will take place north of the Arctic circle in summer 2017.
SEPT. 2010 - SEPT. 2013	**Referee with the Rugby Football Union** I began refereeing rugby union at the age of 15. Within 3 years, I had been promoted from level 15 to level 6 - the highest regional level and only one below the point where I could referee national level games. The experience of taking charge of 30 men (often twice my age) in an aggressive and physical sport has given me confidence in my ability to remain calm in stressful situations.
SEPT. 2009 - JUL. 2013	**Young Leader at 1st Helsby Scouts** Developed communication skills whilst helping to supervise and teach children aged 6 - 10 years. I was regularly assigned to lead small group activities which improved my organisation and leadership skills.

EDUCATION

CURRENT	BSc Mathematics and its Applications Cardiff University, Department of Mathematics Expected May 2017
SEPT. 2011 - JUNE. 2013	St. Nicholas Catholic High School A-Levels: Maths - A*, Further Maths - A, Physics - A AS-Levels: Biology - B, Chemistry - B
SEPT. 2006 - JUNE. 2011	St. Nicholas Catholic High School GCSEs: Maths - A*, Additional Maths - A*, Physics - A*, English Language - A*, English Literature - A*, Biology - A*, Chemistry - A*, French - A, History - A, RE - A, Art - B.

SCHOLARSHIPS AND PRIZES

MAR. 2015	Sage Conference at UC Davis, California - Earned the opportunity to spend a week attending a conference dedicated to Sage held at UC Davis during which I contributed code related to Alternating Sign Matrices `https://wiki.sagemath.org/days64`.
JAN. 2014	Django Conference - I was invited to talk at the UK's first ever Django conference where I presented the work I had completed for my computing coursework.
DEC. 2013	Department of Mathematics Prize - awarded for the highest mark in Computing for Mathematics module.
SEPT. 2013	Department of Mathematics Scholarship - awarded to the top 10 students who achieved the highest 'A' level grades of that year's intake.

PROGRAMMING SKILLS

I am proficient in most aspects of computing:

- Operating Systems: Windows, MacOS, Linux (server and client);

- General software: Excel, Word Processing (LaTeX, Microsoft Word, Libre office), Presentation (Beamer, Microsoft Powerpoint);

- Programming: Python, Django, Ruby, Git, Trac and well evidenced ability to gain proficiency in new languages quickly.

- Supercomputing: Experience using Cardif University's supercomputer `http://www.cardiff.ac.uk/advanced-research-co` RAVEN and submitting jobs using PBS.

For an overview of my programming portfolio, please see my github profile: `https://github.com/theref`.

ACHIEVMENTS AND INTERESTS

I have been involved in Scouting from the age of 8, playing a leading role in the organisation both as member and a leader. Recently, I was appointed a group-wide, adult leader position which will allow me to continue the work I have been doing whenever I am home from University. I will be leading a group of 30 scouts on an international expedition in Norway in summer 2017.

I have played Rugby Union from the age of 5, reaching county standard and playing for the Welsh Exiles before injury forced my retirement. This gave me a lot of experience of working within a team, both as a captain and a member.

At University, I took up the sport of ultimate frisbee. I have been promoted to the first team, represented my university at several tournaments (including varsity) and was elected to serve as treasurer for the previous academic year.

In my spare time I relax by playing the piano, having achieved Grade 5 some years ago. I hold a full, clean UK driving licence.

REFEREES

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