

PERSONAL PROFILE/OBJECTIVE

I am an exceptional undergraduate mathematics student seeking a one year industrial placement in the fields of mathematics and computer science.

During my first undergraduate year, I was awarded a mathematics scholarship and prize, invited to present my work at an international conference and selected from 160 of my peers to undertake a research internship during the summer break.

EXPERIENCE

SUMMER 2014	Research Internship, Cardiff University Department of Mathematics I was 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 and 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. 2010 - PRESENT	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 I 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, Statistics and Operational Research 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

SEPT. 2013	Department of Mathematics Scholarship - awarded to the top 10 students who achieved the highest 'A' level grades of that year's intake.
DEC. 2013	Department of Mathematics Prize - awarded for the highest mark in Computing for Mathematics module.
JAN. 2014	Django Weekend Conference - On achieving the highest mark for an individual research project, I was invited to present my work at the UK's first ever Django conference: https://djangoworkshop.org/event/python-ladders/

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 and well evidenced ability to gain proficiency in new languages quickly.

For an overview of my programming portfolio please see my github page: <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 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 second team, represented my university at several tournaments and elected to serve as treasurer for the next 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.

FIRST YEAR GRADES

EXAM	CREDIT	%
Analysis I	10	78
Dynamical Systems and Chaos	10	80
Calculus	10	71
Algebra I	10	62
Probability Theory	10	81
Algebra II	10	?
Analysis II	10	?
Elementary Differential Equations	10	?
Statistical Inference	10	?
Elementary Number Theory	10	?
Computing for Mathematics	20	95
AVERAGE		?