

Summary

I am a hardworking, determined and enthusiastic individual who fully commits to the task in hand; I have demonstrated during my relatively short career that I am able to exceed expectations and obtain a high level of achievement working on my own initiative or as part of a team.

Through my undergraduate degree studies and participation in challenges like the IBM Mainframe Challenge, I am already expressing my aptitude and enjoyment for developing high quality solutions to problems with answers that are not necessarily easy to reach.

Previously, I relocated to Ireland to work with Google's Enterprise team; where I wrote a series of Python scripts and a web application to automatically audit the company's many thousands of Helpcentre answers that are used by millions of people across the globe. The application now enables content developers to better focus their efforts on "high impact" answers and gives access to data that had not previously been so easily available.

Through my experience to date which includes Google Ireland, City & County of Swansea and Swansea Metropolitan University, I have shown myself to be dedicated and reliable with a high regard for customer satisfaction and a desire for perfection in work produced. This desire has led to my position of Quality Assurance Manager for my academic year's group project.

I have just graduated from Aberystwyth University First with Honours in Computer Science and Statistics, one of the only holders of the degree in the UK. Following a First Class performance in both my first and second years, I spent a summer with the Wellcome Trust Sanger Institute before my year in industry at the Numerical Algorithms Group.

I am now pursuing a Computational Biology PhD at Aberystwyth.

Education

2014 - Present
 Doctor of Philosophy

Computational Biology PhD
 Aberystwyth University

Working Title Extraction of Exciting Exploitable Enzymes from Massive Metagenomic Datasets

Awarded departmental scholarships with departments of Computer Science and Biology

2010 - 2014
 Joint Bachelors Degree (Science)

Computer Science and Statistics BSc
 Aberystwyth University

Awarded First Class with Honours,

Dissertation Application of Machine Learning Techniques to Next Generation Sequencing Quality Control

Awarded £2,000 Excellence Bursary

Elected member of Staff-Student Consultative Committee, re-elected for second year

Student Ambassador for Department of Computer Science

Frequently running unofficial Computer Science social nights, attracting around 20+ fellow students

Quality Assurance Manager for Software Development Lifecycle Group Project

Dissertation awarded Best Minor Project of Year

Received O.L. Davies Prize in Statistics for best undergraduate performance in statistics

2009 - 2010
 Cisco Academy

Cisco Certified Networking Associate (CCNA Exploration)
 Swansea Metropolitan University

Scored over 75% for each of the four modules, due to sit final certification exam.

2007 - 2009
 A Level & BTEC National

Mathematics, Statistics and Interactive Media
 Gorseinon College

Interactive Media National BTEC - Distinction Merit

Pure Mathematics and Statistics A-Level - B

Authored the "Don't Panic" guide to AS Statistics which is now in use across all Statistics classes at the college.

2002 - 2007
 GCSE

General Certificate of Secondary Education
 Pontarddulais Comprehensive

GCSE Profile 2A*, 6A, 1B

Co-created the Yearbook for the Class of 2009

Filmed and edited a DVD designed to ease new Year 7 students into the new school environment

Obtained 100% in each aspect of Information Technology coursework

Wrote my first C program to complete Mathematics coursework

Memberships

2015 - Present

Society for General Microbiology, PG Member

2015 - Present

International Society for Computational Biology, PG Member

Research Visits

Aug 2015 - Oct 2015	Katholieke Universiteit Leuven Leuven, Belgium
Jun 2015 - Aug 2015	Wellcome Trust Sanger Institute Cambridge, United Kingdom

Employment Record

Jun 2015 - Present Short-Term Contract	Human Genetics Informatics Software Developer Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridgeshire.
Sep 2014 - Present Short-Term Contract	Demonstrator Aberystwyth University, Penglais Road, Aberystwyth.
July 2014 - Sep 2014 Short-Term Contract	Research Assistant Aberystwyth University, Penglais Road, Aberystwyth. Employed to continue work begun during my undergraduate dissertation.
Sep 2012 - Sep 2013 Industrial Year	Numerical Libraries Software Engineering Intern Numerical Algorithms Group, Jordan Hill, Oxford. FORTRAN95 and Python Software Engineer <ul style="list-style-type: none"> Primarily worked on a simulated annealing routine for approximating solutions to travelling salesman problems Deployed Jenkins to replace current outdated build management system Co-authored Python scripts to generate Python wrappers for parts of the NAG library
Jun 2012 - Sep 2012 Internship	Human Genetics Informatics Intern Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridgeshire. Perl and Python Software Engineer Responsible for the creation and deployment of the "Inside your Genome" web application; serving genetics results to hundreds of participants at the institute. Also wrote Python scripts to conduct research on human mtDNA to search for probing sequences that would allow identification of a participants haplogroup from as few SNPs as possible.
Sep 2011 - Jun 2012 Volunteer	Google Student Ambassador Aberystwyth University, Penglais Road, Aberystwyth.
Jul 2011 - Sep 2011 Internship	Enterprise Technical Associate Intern Google Ireland, Barrow Street, Dublin 4. Initially tasked to perform a manual audit of Google's GMail Helpcentre resource, I immediately set out to find a more scalable solution to the initial problem. Rather than performing an intensive manual audit that would soon be outdated, I created an application that could automatically perform such an audit on any Google Helpcentre at any time. The result, written in both a language and development environment I had never used before, crawls through the desired Helpcentre website, mapping the structure and pulling data on every article from various internal databases. The system presents its findings via a user friendly web interface that supports search, filters and sorts; assisting content developers to focus efforts on "high impact" articles as well as giving localisation teams an insight they've never had before on the status of translations in various languages for thousands of articles. The system also gives access to other data that had not previously been so easily available, such as analytics and information regarding embedded resources. During the development of the application I reached out to senior developers in California and New York to assist me and the final result was presented by myself in a broadcast internally across the world to managers and interested staff.
Mar 2011 - Apr 2011 Casual Employment	Student Ambassador Aberystwyth University, Penglais Road, Aberystwyth.
Jul 2010 - Sep 2010 GO Wales Placement	Assistant Network Technician Swansea Metropolitan University, Mount Pleasant, Swansea.
May 2010 - Sep 2010 Short-Term Contract	Delicatessen Counter Sales Assistant Morrisons, Pemberton Retail Park, Llanelli.
Jul 2009 - Dec 2009 Short-Term Contract	Communications Administration Assistant City & County of Swansea, Civic Centre, Mumbles, Swansea.
Feb 2009 - Jul 2009 Work Experience	Communications Team Work Experience City & County of Swansea, Civic Centre, Mumbles, Swansea.
August 2008 Volunteer	Technical Crew Assistant St. David's Hall (National Concert Hall), The Hayes, Cardiff.
Dec 2007 - Feb 2008 Casual Employment	Sales Assistant NEXT, Pontarddulais Road Retail Park, Fforestfach, Swansea.
Nov 2005 - Mar 2007 Casual Employment	Waiter The Glamorgan Arms, Pontlliw, Swansea.
June 2006 Work Experience	Production Assistant Tinopolis, Park Street, Llanelli.

Interests

- Creating short comedy films that have aired around the world at small film festivals.
- Shooting and editing performance videos, producing professional quality DVDs for local dance and stage companies.
- Model rocketry - although projects are currently resembling smoke machines more than rockets.
- Late night coding sessions in the Computer Science laboratory alongside colleagues.
- Tinkering with my Arduino robot
- Probability and Statistics
- Piano and Drums

Achievements

- Successfully applied to become a Google Student Ambassador for my University for the 2011 Academic Year
- IBM Mainframe Challenge 2010 Finalist
- 2009 Coalfields Regeneration Trust Talent Nurture Fund Awardee
- In 2008, co-organised, promoted and presented two sell-out music events at a large local music venue
- Multiple-time Quickflick World Film Festival International Showcase Winner
- Top 15 Finalist, 2nd International Babelgum Online Film Festival
- 2005 BBC Blast Television Broadcast

Awards

Best Student Presentation, 1st Student Symposium on Computational Biology and Life Sciences (2014)

Departmental Prize for Best Minor Project, Aberystwyth University (2014)

Awarded to the final year student with the best minor project dissertation in Computer Science department

O.L. Davies Prize in Statistics, Aberystwyth University (2012)

Awarded to the undergraduate student with the best performance in Statistics in memory of the Professor Owen L. Davies

References

Available on Request