

Jonathan Francis Roscoe

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PROFILE

I am a **dedicated** and **tenacious** developer with the initiative to imagine and pursue new ideas. I enjoy creating solutions to unique problems and developing new skills. My technical interests lie in the design and development of tools for **image processing** and **multivariate data visualisation**.

Through exposure to a variety of technologies I recognise that I am a **polyglot programmer**, with the aptitude to adapt to unfamiliar systems, techniques and knowledge to accomplish new projects. **Java, PHP and C/C++** have constituted my primary programming experience. My work typically uses an **object-oriented** paradigm with appropriate **architectural patterns**.

I believe it is important to continue learning and feel the opportunity for professional development as well as training in new areas of computer science is essential. My ideal position should be challenging and provide opportunities to develop both new and old products.

ACADEMIC HISTORY

2011 - present

Aberystwyth University

My thesis, funded by the Prostate Cancer Charity concerns improved staging and localisation of prostate cancer through multi-modality data fusion.

2006 - 2011

Aberystwyth University

I received a 1st in 2011 for my **MEng in Software Engineering**. My major project was a C++ image processing project titled *"Bilateral Comparison of Breast Tissue Density by Using Grey-Level Statistics in 2D Mammograms to Identify Regions of Abnormality"*.

2004 - 2006

Queen Elizabeth Cambria, Carmarthen

3 A-levels (A-C) in Biology, English Literature and Computing
Advanced Extension Award (Merit) in Critical Thinking

SKILLS AND ACHIEVEMENTS

- I have a **fun and adventurous** outlook as kayaker (BCU certified), kite flyer (BKSA member) and hiker.
- Giving back to the university that I have come to love, I have **volunteered** to teach an introductory programming class to new students and currently assist in other facets of the department.
- **Interpersonal skills** are of great value to me and I **seize opportunity** to involve myself with new people. I recently moderated talks at FOSDEM 2011, which gave me an unparalleled experience meeting well known software developers.
- I appreciate opportunities to **challenge myself in new ways** and recently participated in the 2011 IBM Mainframe Challenge during which I explored an entirely unfamiliar IBM System z computer.
- With an **entrepreneurial** mindset, I am a finalist in The Graduate 2011 competition by the BCS.
- **Willing to travel and relocate**, I have lived across the UK and in Germany, hold a full UK driver's licence and have previously spent periods on a daily rail commute.
- I stand on the committee of the the BCS Mid-Wales branch, **liaising** with students to encourage **personal and professional development**.
- I have supervised and assisted canoe groups during summers in the Lake District and encouraged them to **work together** to **overcome challenges**.
- As a representative in the staff student committee for the past three years, I have taken **responsibility** for the satisfaction and wellbeing of my fellow students.
- Frequently liaising with developers in a satellite office, I utilised Internet telephony and screen sharing systems to **effectively collaborate and communicate**.
- An **imaginative problem solver**, I received a first-class grade on a C++ image processing project realising my own **novel** technique for analysis of mammograms as my third year dissertation.

- During my industrial year I developed **real world code** for managing Internet services for small/medium businesses that is still in active use and has significant value.
- Through development of multiple systems using .NET with C#, Ruby on Rails and Symfony for PHP I have a strong **practical knowledge of enterprise web development**.
- I **lead** a Master's level group project to design and implement a distributed enterprise system using **JavaEE and .NET**, I have influenced choices to utilise an XP methodology, implementing practices including **test-driven development, simple design and customer participation**.
- My **exposure to a wide variety of technologies** through academic, industrial and extra-curricular experience has given me the ability to **adapt and expand** my skill set to accommodate new challenges.
- **Understanding of system interoperability** through working with application layer protocols including **SOAP over HTTP, IRC and SIP**.
- I **enjoy learning** about my field and have attended an assortment of University and BCS workshops and seminars on topics including **Scrum, XP and general development practices**.

PROFESSIONAL EXPERIENCE

2009 - present

Student Advisor

Aberystwyth University, Aberystwyth

As a student advisor I have taught classes on programming with perl and PHP, provided support during schedule laboratory sessions and guided students with their projects in a drop-in advisory service.

I have dealt with a variety of technical challenges on many differing projects involving technologies such as Java, MySQL and Python.

I have brought my keen attitude and interpersonal skills to the role to effectively assist students with their problems and help them grasp unfamiliar ideas.

2008 - 2009

Software Engineer

Gradwell, Bath

I developed, maintained, tested and deployed back-end code for web based control panels to manage Internet services, primarily VoIP, but also including broadband, email and web hosting. I worked on a multi-tiered architecture to manage multiple aspects of the business, including end-user controls, customer management and sales operations. The work involved frequent interaction with support teams and communication with clients to implement new features to suit their requirements, ensuring mutual understanding and expectation.

Through interactions with multiple levels of the company, my duties led me to a greater understanding of the needs of businesses and a profound respect for fast, effective and reliable software development.

During my time I made myself available to those I was able to help, and worked the extra mile to make improvements to a neglected system in order to improve customer and staff experience. I am proud to say that the majority of my work is still in active use, including a system that enhanced the selling ability of wholesale clients.

2007 - 2008

Web Developer

Onebrightspace, Aberystwyth

I worked part time with a local web development firm where I focussed on Ajax enhancement of portal based Python websites for multiple clients.

As my first IT employment, I gained comprehension of the importance of team and customer collaboration, adapting to unfamiliar situations and listening to the guidance of my coworkers.

The role offered me a unique opportunity to develop and I committed myself to the role and successfully contributing to the effectiveness of the company's production rate, with code still in active use.

INTERESTS

Whilst I am passionate about my industry and dedicated to the development of my technical abilities, I have a well balanced lifestyle. I enjoy being active and outdoors in my spare time. As a certified BCU kayaker, member of the British Kitesurfing Association and an amateur photographer I have many choices when it comes to exploring my environment.

Travelling is an enjoyable experience for me and not only will I will be spending the coming July in Malaysia, on a diving, kayaking and photography holiday, but I will also be visiting coastal Pembrokeshire and the Lake District.

REFERENCES

Available on request.