

## Education

**The University of Sheffield**  
**1st Class BEng Software Engineering**  
**September 2006 - June 2010**

**Akeley Wood Senior School**  
**A Levels:** Business Studies A, Computing A,  
Psychology C  
**GCSEs:** 1 A, 4 Bs, 4 Cs  
**CLAIT Level 1:** Word Processing,  
Spreadsheets  
**December 2001 - June 2006**

## Work Experience

### Web Developer

**Thin Martian, July 2010-Present**

*My main responsibilities at Thin Martian included building the backend for a number of clients' websites and microsites using the .NET Framework and PHP, and also any front-end Javascript (jQuery) required.*

### IT Technician

**Milton Keynes Hospital NHS Foundation Trust, June 2007-Sept 2008**

*Front-line support for hospital computer users, taking technical support calls & on-site support and repairs, and network maintenance.*

## Technical Skills

### Software

*Microsoft Office Suite, Adobe Photoshop, Flash & Illustrator (CS1-CS4), Visual Studio, Eclipse, Netbeans, Microsoft Windows (ME, XP, Vista, 7), Linux (openSuSE and Ubuntu), Mac OS X, SVN, Git*

### Programming Languages

*Java, C#, Python, PHP, MySQL, CSS, (X)HTML (including HTML5), XML, Javascript, Pascal, MySQL, Haskell, PROLOG, MongoDB*

### Programming Concepts

*Agile Development, Object-oriented Design, MVC, MVVM, AJAX, Modular Design, Event-driven programming*

### Programming Frameworks

*.NET MVC2-3, .NET Webforms, Smarty, jQuery, Lithium*

## About Me

In my free time I enjoy socialising, programming, web designing, reading and playing computer games. I am also interested in theatre, enjoy acting and singing, and have taken part in plays at University and school. I write music and play the guitar - sometimes live - and I performed in an improvisational comedy troupe in my second year of University.

I like to keep fit by running, I successfully ran a half-marathon in Sheffield, raising sponsorship money for the Macmillan Cancer Care charity. I was part of the trampolining club at University, I also have recently taken up kickboxing, not to mention my mean table footballing skills!

On top of that, I also enjoy photography and drawing as creative outlets, which have been useful in improving my ability in Adobe Photoshop and Illustrator.

# Main Interests

In Software Engineering, I have a broad range of interests - Machine Learning, 3D Graphics & Multimedia Technologies, Text Processing and Artificial Intelligence to name a few. However, my main passion lies in the Internet and the World Wide Web.

I have long been fascinated by the Internet's capabilities as a medium for allowing people to communicate so easily across such vast distances, and of course due to its leading to the creation of the World Wide Web. As the web is made up of increasingly complex and flexible technologies, blurring the lines between traditional desktop applications and web applications.

With recent developments in the technologies that make up HTML5, we're getting closer, and I think the web is the future of a lot of how we interact with computers. This is where my main interests lie because I believe there is a lot of potential in that future: for desktop, for mobile, and on the server-side.

## Projects I've Worked On

Although I've had plenty of experience developing websites and small programs in my spare time, at University and at work, I've picked out a few of the more interesting ones below. If you'd like to hear of any that utilised other technologies please email and ask me.

**Dissertation: Analysing Diversity within the Online News** - <http://bit.ly/kOhQGU>  
*Solo Project; Utilised PHP, Python, MySQL, HTML, Javascript, CSS, Google Charts API*

In my third year at University, I developed a system for analysing the diversity of topics within online news. The system is primarily powered by Python. It fetches news articles from RSS feeds of popular newspapers' websites, then extracts the article text from the appropriate page. Using TF.IDF term weighting and cosine similarity articles are clustered together by their determined topic, which is used to calculate diversity scores. I had also planned to implement sentiment detection, so that the tone of articles could be determined (i.e. negative or positive) so all this information could be used together to analyse the topical content of the British media. The end result was be an interactive website driven by PHP, MySQL and Python to display information in an interesting and flexible way with graphs and a search engine.

**Capital Radio Jingle Bell Ball Deep-Zoom** - <http://bit.ly/jccZrC>  
*Thin Martian & Global Radio; Utilised C# .NET, jQuery, MSSQL, HTML, CSS*

A major project of the last year has been creating a javascript-powered "Deep Zoom" mosaic for Capital Radio's Jingle Bell Ball event. As pictures streamed in from Capital's mobile API, administrators built up a mosaic using a secure panel with cropping & resizing tools, which was pushed to their website for eventgoers to spot themselves in. It utilised the Seadragon javascript library to display the deep-zoom image, but custom tools were written to create it on the server-side.

This project had a very short lead time, and development, testing and launch happened within just over 3 weeks thanks to an agile approach.

**Hotmail Stories** - <http://bit.ly/IVFn5o>  
*Thin Martian & Microsoft; Utilised C# .NET, jQuery, MSSQL, HTML, CSS*

Another major project was a social media-driven competition developed for Microsoft's Consumer & Online division, working in a small team consisting of myself and a designer. We created a website where users submit stories over a three-month period in different categories, administrators moderate these stories and then users vote using Facebook Likes. Through the admin panel, stories' Likes are collected from the Facebook API and this is used to choose winners each month.

The front-end is a single-page website which uses Javascript to create a fluid and modern experience.