

Tim Williams BSc MSc MBCS Curriculum Vitae

Specialist in Internet Technologies, E-Learning, Linux and Java programming, currently employed as a Research Associate at the University of Birmingham, School of Computer Science. Originally trained as a microbiologist, but with many years experience of both using and programming computers.

Personal Details

Name :- Timothy Michael Williams.

E-Mail :- tim_mw@yahoo.co.uk

Web Homepage : <http://www.my-place.org.uk>

I don't publish my full contact details here, please use the above email address. Due to spamming, this is not my main address, but I usually check it 2-3 times a month.

Education

MSc Computer Science (Information Technology)

Conversion course at the University of Birmingham for graduates of other disciplines. Completed in 1998.

BSc Biological Science (Microbiology)

Grade of 2ii awarded summer 1997 by the University of Birmingham.

Sixth form :- Wells Blue School Sixth Form, 1992 - 1994

3 A levels (Biology, Chemistry, Physics) and 1 AS level (General Studies).

Secondary Schooling - Wells Blue School, 1987 - 1992

10 GCSE's (including two dual awards, awarded summer 1992)

Current Employment

University of Birmingham, School of Computer Science, Autotrain Project delivering E-Learning to the Automotive Supply Chain. October 1998 onwards.

- Project websites <http://www.autotrain.org>, <http://www.autotrain-europe.com> and <http://www.euromotor.org>.
- Operation and maintenance of Apache web servers, streaming video servers (Quicktime Darwin and Real Networks), MySQL Database and Open Source Moodle on-line learning platform (also experience of WebCT 2.x and 3.x, now decommissioned) on Sun Solaris (UNIX) platform.
- Conversion of WebCT learning material (exported in XML based IMS format) into the Moodle XML based format for import into Moodle. (Now complete)
- Website development using HTML, Javascript, Java (including Servlets/JSP), PHP, Apache SSI, SQL (for database).
- Recording, capturing, editing, post production and preparation of video material for web streaming.
- Development of sophisticated video streaming solution for on-line lectures (with capability for synchronised slides and multi-lingual subtitles), using Real Player, Quicktime and Windows Media. (See <http://www.autotrain.org/video-demo/>).
- Java application development.
- Development of on-line course material.
- Attending and presenting to UK and International steering board meetings. Working with these UK and International partners to further the project aims.
- Presentation of the project at exhibitions/seminars/conferences.
- Java teaching for the Msc Computer Science Conversion Course.
- Deal with any hardware issues which may arise (fitting new Hard Disks etc).

Previous Employment

- Occasional consultancy work for Wells Computer Consultants, 1992 onwards
- Temporary Laboratory Assistant, TDL Leatherhead Wells Division, August-September 1996

Computing experience

- **Skilled in Software Design/Analysis for non-trivial applications.**
 - Design for Java applications
 - Web application design
 - Object Oriented Programming and Design

- **Computer Languages and associated technologies**

- Skilled Java Developer, 7+ years experience
- Extensive experience of Java Servlets and related technologies
- Use of additional Java api's eg Java Mail, Java Advanced Imaging, Swing, Java Comm, JDOM, JSP (Apache Jserv and Tomcat), JDBC, Applets
- HTML/DHTML/XHTML/CSS web page development (including accessibility requirements and hand coding)
- Extensive Javascript experience, including significant work using Javascript with Macromedia Flash, Real Player, Quicktime and Windows Media Player web browser plugins.
- PHP
- XML/XSLT
- UNIX shell scripting.
- Apache SSI (Server Side Includes)
- SQL (using MySQL database)
- Some knowledge of Perl
- BBC Basic v2 to v6 (1985 onwards)

- **Network Technology Skills**

- TCP/IP Networking and DNS.
- Installation and configuration of 802.11 Wireless networking with WEP
- Setup and configuration of server systems for small intranet systems, using Linux.
- Installation and configuration of server software/services/clients (where applicable, mostly on UNIX systems) :-
 - Apache Web Server and Apache Jserv, Apache Tomcat
 - Samba
 - Squid proxy server
 - Postfix and Sendmail mail servers.
 - Spamassasin
 - Dhcp/dhcpd
 - Bind 8/9 DNS Servers
 - NIS
 - NFS
 - Secure Shell (OpenSSH)
 - MySQL Database
 - Linux Firewall configuration and maintenance, using iptables and ipchains
 - Various ftp servers

- **Distance Learning Technologies/E-Learning**

- Opensource Moodle VLE (Virtual Learning Environment, 2003 onwards).
 - Management and installation of the platform
 - Customisation of the platform, including source code modification and additional modules
 - Conversion of WebCT course material into Moodle XML backup format (using IMS standards based process).
 - Log analysis work
- WebCT (1999-2003)
 - Management and installation of the platform
 - Use of programmers API to integrate with external applications
 - Some knowledge of internal file structures
- Familiar with IMS/Scorm standards for learning objects
- Development of course material for above platforms

- **Audio/Video Skills**

- Non-linear video editing using Adobe Premiere and Video Action PVR.
- Video Streaming using Real Player/Real Server and Apple Quicktime/Darwin Server and Windows Media
- Camera work
- Sound engineering skills.

- **Computer Operating Systems and platforms.**

- Extensive experience of Redhat Linux and Mandrake/Mandriva Linux on x86 Platform. (1998 onwards) 2.0 - 2.6 series kernels.
- Sun Solaris
- Windows 3.1/9x/NT/2k/XP and DOS
- Acorn RISC Computers using RISC OS 2, 3.x (from 1990 onwards)
- Some contact with Apple Mac and Digital Alphas
- Variety of Legacy home computers including BBC Micros, Apple II (Mid 80's)

- **Linux related skills and experience**

- Co-Founder of the and current coordinator of South Birmingham Linux User Group
- Active in the UK Open Source Community
- Regular contributor and problem solver on SBLUG mailing list
- Ability to configure and build customised linux kernels from source
- Installation of additional kernel modules from source and use of patch tools to add additional code to the main kernel source tree
- Build and installation from source of many linux (and solaris unix) applications, including complete source builds of the KDE Desktop, QT libraries, Apache webserver etc
- Knowledge of linux boot sequence and ability to fix basic start up script problems.
- Package management using rpm and associated update tools (yum and urpmi)

- Competent in the use of the command prompt and standard command prompt tools
- Familiar with and skilled in the editing of the base configuration files for most of the main linux services/packages, eg X, samba, apache, lilo, inittab, fstab, kernel modules, networking, xinetd etc
- I have good contacts in the UK opensource/linux community and am very familiar with the workings of the community in general
- Use of linux and unix as normal desktop OS, both at home and work since 1998
- **Misc**
 - Knowledge of a variety of common software (eg Paintshop Pro, StarOffice/OpenOffice, MS Office etc)
 - Experience of hardware modification/installation on PC's and Acorn RISC computers
 - Skilled in Electrics and Electronics, including repair work with a soldering iron and component parts.
 - Some experience of Informix, Postgres databases. (1997 onwards)

Other

- Full UK driving license held since September 1994, no endorsements
- Extensive experience of team leading/management and team working skills.
- Experience of chairing meetings/discussions.
- Experience of writing project reports (from my academic work)
- Experience of organising large events, trips etc (mostly entertainment related)
- Member of Guild Council at University of Birmingham Guild of Students Oct 1994 - May 1998
- Griffin Close Residents Association Committee
 - Joined committee March 1995
 - Vice-President March 1996 - May 1998, representing over 1000 students
 - Over £70 000 annual turnover
 - Teamwork and leadership skills
 - Bi-annual Ball's for 350-400 people
- Part time DJ 1996 onwards at Griffin Close, Guild of Students, University of Birmingham HUB and Birmingham City Centre venues.