Mr Paul Arlott

Skills

Programming	Used Since	Last Used	Rating
PHP	2000	Current	10
MySQL	2000	Current	10
C/C++/Visual C++	1990	2000	10
FORTRAN	1988	1992	9
COBOL	1988	1992	8
Visual Basic	1990	1992	10
Ada	1990	1997	5
Assembler: 80x86, 680x0, Z80, 6502, Transputers, H8	1988	1992	9
Occam	1989	1992	10
PHP framework development, fusionLib.com	2011	Current	10
CMS development, clearFusionCMS.com	2011	Current	10

Tools & Applications	Used Since	Last Used	Rating
Microsoft Office	1987	Current	8
JIRA project tracker	2009	Current	8
Confluence	2009	Current	8
Git	2012	Current	7
Subversion	1997	2012	8
VMWare Workstation	2005	Current	9
Adobe Creative Suite	2006	Current	7

Operating Systems	Used Since	Last Used	Rating
Microsoft Windows	1990	Current	9
Linux Desktop (Various Distributions)	1996	Current	9
Linux Server (Various Distributions)	1996	Current	9
Windows Server	2011	Current	6
Solaris	1990	1998	9
Irix	1990	1998	9

Hosting	Used Since	Last Used	Rating
cPanel/WHM deployment, upgrades and management	2003	Current	9
DNS & cPanel DNS only	1997	Current	10
R1Soft CDP Server deployment, management & integration with cPanel	2008	Current	8
Apache	2003	Current	9
Linux server deployment	1997	Current	9
Day to day Linux server management	1997	Current	9

Employment History

2014 – present, Crowdfunder.co.uk

Employed as a PHP Developer within the development team to maintain the website and build new features required for business development.

Responsibilities:

- Maintenance and development of the payment systems used within the site.
- Optimisation of performance through the use of tools and libraries such as redis and resque.
- Optimisation of performance by rewriting SQL queries and other code to be more efficient.
- Integration with 3rd party services via RESTful APIs for email management and video encoding.
- Code review of deliverables by junior programmers and the control of code deployments to the production server.
- Building of front end systems in HTML5, CSS/LESS and JavaScript.
- Extensions to the backend systems and development of additional Content Management Components to allow non-technical members of the company to update the front end content and data collection forms.

Agile development methodologies were employed within the development team, therefore part of my duties was aiding in or the planning and running of sprints.

1997 – 2015, TOLRA Micro Systems Limited, www.tolranet.co.uk

Founded TOLRA Micro Systems Limited as a UK company in 1997 to provide web services to clients and became the director of the company.

Responsibilities:

- Design and development of websites - static HTML, PHP/MySQL driven websites, integration of 3rd party applications
- Liaising with clients to capture website requirements and budgets.
- Testing of the finished solution to the requirements agreed with the client for the build.
- On-going support of the site for the client.
- Management of multiple Linux servers that host client websites.
- Providing shared hosting to individuals and companies all over the world - management involved the initial configuration of the server as well as the day-to-day management of the servers and backup systems, R1Soft. It also requires that technical support questions are answered and genuine issues resolved efficiently to the satisfaction of the client. As clients are not always technically competent it requires that responses to clients be clear and easy to understand with added explanations where required for the client to understand the solution.
- Construction and on-going development of an e-commerce platform - including integration with several payment gateways such as WorldPay, SECPay (now PayPoint), PayPal. It is one of the few platforms that successfully operates with the HSBC payment gateway and as such has been listed on the HSBC website.
- Construction and on-going development of a PHP/MySQL directory

To improve user experience with issues such as configuring email access and for resolving issues for less technically competent clients, duties included the selection and implementation of remote access technology, gotoassist initially then later ScreenConnect which is self-hosted on a Windows server. Through the use of remote access technology the clients computer can be controlled allowing me to show the client how to configure email and other services.

Other development has consisted of various scripts, PHP framework, a CMS and modification of 3rd party scripts along with the creation of snippets for use in the MODx CMS (some now form part of their snippet repository while others remain property of TOLRA) these include the pulling in of data from vBulletin and other sources.

1987 – 1998, Senior Prototyping Engineer within the Cockpit and R&D Group, at British Aerospace

Joined British Aerospace (BAe) from school under their technician apprentice scheme. The 1st year of this scheme required the apprentice be taught the basics of a wide range of skills used within the aircraft industry, these skills range from metal fabrication through to computing and design. The subsequent 3 years are spent with the apprentice working in various departments throughout the company to gain practical skills and experience of application of learnt principles to the real world. Throughout the 4 year apprenticeship the apprentice is required to attend collage for 1 day a week and additional evening courses as required. The remaining 7 years were in full time employment by BAe.

Due to working for a military aircraft corporation many projects were deemed 'classified'. Experience was gained with maintaining security in both the workplace and computing environments.

Initial experience was gained working with C/C++, assembler and Occam in conjunction with various commodity and custom hardware. This experience later fed into the building of simulators and exhibition displays for the Farnborough Air Show where real and virtual systems where mixed to provide a complete simulator.

As a member of the human factors cockpit group, responsibilities included; the creation of rapid prototypes of avionic systems for the evaluation of the interaction of personnel with the proposed systems, with results of this testing fed back into the formal design process. This required close cooperation with the human factors engineer and changes made to models in very short periods of time, sometimes while the customer was present.

Other responsibilities included the creation and management of source code repositories, creation of coding standards and codes of practices for the development of prototypes.

During my time at BAe I won the chairman's award for my efforts in streamlining the development process of simulation models through my contribution to the project of a performance optimised software implementation of OpenGL using native X11 primitives.

Experience

Australian Web Awards

In 2011 I was asked to be a judge for the development category of the Australian Web Awards, http://www.webawards.com.au/judges/, a yearly event organised and run by the Australian Web Industry Association (AWIA). I was again asked to be a judge for the 2012 awards.

System Manager

At the end of the first year of my Technician training at British Aerospace I took over the management of the Training Schools computer network.

Within TOLRA Micro Systems Limited I administer the daily operation of Linux based cPanel web hosting servers and the initial set-up, configuration and security hardening of the servers. Management also includes dedicated backup server running R1Soft CDP software, multiple DNS servers and XEN based virtual machines.

Quality Assurance Software

I designed and implemented a set of programs to automate the quality assurance process involved in accepting new versions of the design/modelling software used by the Stress Office at British Aerospace.

Transputers

I was involved in the design of the hardware for a high speed data acquisition system, based round multiple Transputers.

Along with the hardware involvement I designed and wrote an Operating System that would run on the hardware. The Operating System had to be capable of being re-configured at run time to work on any number of Transputers in

the array. Also it had to monitor each Transputer in the system and reschedule tasks onto other Transputers, and find new routes for messages when a processor or card failed.

Real-time Communications

Within the UNIX environment of Silicon Graphics and SUN Workstations, I wrote an application to allow data to be exchanged between applications at high speed. Applications running on the same machine as the communications software transparently used shared memory, while remote applications used Ethernet. The communications protocol is kept hidden from the user, programmer and the applications itself.

68010, 8086, 6800 processors

I designed and built single card computers based around each of the processors. For each computer a monitor program was designed and implemented, to allow connection to a host computer or a dumb terminal.

Modelling Software

I have been involved in the development of various modelling software, which required the following:

- The development of a complete Windowed Graphical User Interface on the PC.
- Printer drivers for LaserJet and HP ColourJet printers.
- X windows programming only using the basic X11 library, to allow the maximum portability.

Cross Platform Development

I have developed libraries of routines to speed development, of new projects. These routines had to work on both Silicon Graphics and SUN workstations, as they were the principle development environments.

I have developed a harness that allows SUN's running OpenWindows to support a subset of the GL programming library. Commands supported include full 3D manipulations via the normal stack commands, stencilling, and double buffering.

Simulation

I have developed a terrain database, which allows a user to fly around Great Britain in real time, on a Silicon Graphics INDIGO2 Extreme.

System Administrator for PC Security

During the first half of 1994 security software was introduced to the British Aerospace PC's to limit unauthorised access. With the introduction of the Software, along with my other duties as Prototyping Engineer, I became the systems Administrator for the whole of the Systems Technology department.

Machines / Systems Used

Experience on both Silicon Graphics Personal IRIS, and Indigo workstations running IRIX operating system has been gained, with GL, OpenGL and X Windows graphical user interfaces used, for rapid prototyping of Aircraft Displays.

I have used SUN Sparc Stations running UNIX and OpenWindows to develop various models.

I have also used VAX VMS, MS-DOS, Linux and Microsoft Windows.

Miscellaneous

I was involved in the introduction of SSADM design techniques for the software development, within the British Aerospace Military Aircraft Division.

I have also written a departmental wide document detailing a style guide for writing C, C++, and FORTRAN programs, in a consistent way, detailing both bad practices to avoid, and good practices to use.

Tasks included the review of quality control documents being written for new projects begin undertaken in the departments that I've worked in.

I have provided technical support to end users and developers via tickets and through the use of remote access technology, gotoassist and more recently through a self-hosted version of ScreenConnect.

Academic Qualifications

Four year's Technician training with British Aerospace Military Aircraft.

HNC in Electrical and Electronic Engineering.

Courses Attended

- C++ Programming Course
- Continuous Quality Intuitive Training Course
- Real-Time Structured Analysis and Design
- Object Orientated Analysis and Design