

## Keith Ealanta

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Date of Birth 20 March 1969

## Employment Objective

To find employment in a role that allows me the chance to be involved in creative software development, either alone or as a member of a team. My ideal would be to find a long-term position as technical leader for a small to midsized team preferably in ui development. It should also be a position where innovation is useful to the completion of my work.

## Main Proficiencies

Programming in C++, C#, C, VB, Perl, Assembly code and many other languages.

Rapid adaptation to new languages, libraries and methodologies.

Expert at resolving complex design issues.

Project Design and Management.

Multimedia, Graphics and User Interface Development.

Internet service coding including .Net web services and internet system administration.

## Professional Experience

Professionally, I have been involved in a wide range of computer work, from computer games through databases, to embedded software. Recently my work has led me into leadership roles, (supervising a multimedia development), hardware level work (as an embedded software engineer), database work (on Gigabyte-Terabyte databases), and network admin and development. I have remained broadly multi-skilled, while focusing on graphics and related disciplines. I spend my spare time at home working on a number of ideas in game development.

## Education

**Latrobe University 1987 to 1988**

**Bundoora, Victoria**

Bachelor of Science.

Completed First Year, Failed second year due to ill health.

**Monash University 1992 to 1994**

**Churchill, Victoria**

Bachelor of Computing. Invited to continue on to honours study.

Top five subject results were

- Computing 3 (C++ & O.O. Design) 99%
- Digital Electronics and Computers 98.75%
- Commercial Programming 96%
- Analogue Electronics 90%
- Database Management Systems 88%

## **Work History:**

**September, 2008 to Present**

### **Unified Healthcare Group (Prahran Victoria)**

Worked as senior developer and architect then also as a team leader bringing a major systems integration and updating project through to completion.

#### **Environment/Packages**

Developed on Windows servers using C#.net, SQL, and Javascript, while also maintaining legacy systems in Access, VB.Net and VB6. Worked with IIS5, 6 & 7, MS sql 2005 & 2008, Subversion and Mercurial.

#### **Achievements**

Led the team to the successful first release of the new integrated application, successfully taking the initial architecture and planning and designing the full implementation, including detailed design of critical code segments and recognition of areas where the original architecture was not sufficient to the needs of the organisation.

**April, 2006 to September, 2008**

### **Editure Pty. Ltd. (North Melbourne, Victoria)**

Working initiall as a freelance contractor then full time providing programming, training and systems administration services.

#### **Environment/Packages**

Developed on Debian and Redhat Linux systems using PHP, Perl, C and C++ plus shell scripting, and Make systems. Worked with Apache, Postgresql, MySql, Mail Systems and many others.

#### **Achievements**

Assisted in the successful integration of SquirrelMail into a national education infrastructure, including interface modifications, security corrections and integration, rewriting of backend (IMAP) server software and binding to Apache Authentication systems.

**July, 2005 to March, 2006**

### **Red Tribe Pty. Ltd. (Carlton, Victoria)**

Games programmer, working on first person and platform games. The job involved development work on two games and on a technology demonstration that resulted in the contract for a triple-A title.

#### **Environment/Packages**

Developed for PC, Xbox and PS2 using Gamebryo, Havok, and FMod, programming in C++ and in assembly code for the PS2 IOP and EE processors.

#### **Achievements**

Working as a member of an eight man team we developed a full demo game in two weeks. My own contributions included synchronising of physics and graphics engines to enable object pickups, moving and rotating platforms and vehicles, and a low memory cost special-effect object for applying effects such as bullet traces, smoke puffs, ripples etc.

I also developed a file consolidation system to enable control of graphics assets by packaging multiple files into a single fast access system.

**November, 2004 to July, 2005****Day3 Pty. Ltd. (Blackburn, Victoria)**

.Net web and application developer, employed to bring a large web project back on schedule, and since completing that, to continue with further phases of the project and further related projects

**Environment/Packages**

Developed on PCs in VB.Net, ASP.Net, javascript, and MS SQL server Procedure language within the DotNetNuke framework. Environment was Windows XP through a variety of browsers and environments.

**Achievements**

Quickly went from unfamiliar with the framework tools used for development to being the resident expert. I gradually transitioned to a lead role, taking responsibility for training other developers, preparing project quotes, developing UI and backend code, redeveloping problem systems and testing and deployment of completed systems. I became the local expert in Object Oriented design, specialising in easily expanded code while keeping code simple and easy to quickly produce.

**September, 2003 to November, 2004****Golfink Pty Ltd (Ormond, Victoria)**

.Net developer and systems administrator. Worked to support a massive system upgrade (hardware, software, transition major servers to new location and at the same time supervise, test and debug a new client software, modifying as needed.

**Environment/Packages**

Developed on PCs in C, C++ & C# .net, Bash script, Java, Java script, ASP and Oracle and MS - SQL. Environment was Windows (9x, NT, 2K, XP), Unisys Unix and Red Hat Linux(AS) through a variety of browsers and environments.

**Achievements**

Successfully taking on the role of senior technical support for the transition of an old distributed system to new hardware and hosting, whilst a major system upgrade was performed.

This work involved everything from network administration to software development. It included on the way such tasks as debugging at the TCP and IP packet level, and performing a complete system swap between old and new systems in a single clean cutover with no serious errors.

In this job I was handed almost every possible challenge in the book, from physical data errors (a complete raid crash) to correcting faulty code in linux telnetd, to using probability theory to prove that a piece of code was unworkable, to control, utility system and web site development. In every challenge set me I succeeded in finding a solution and implementing it.

**April, 2002 to August, 2003****LTDNetwork (Melbourne, Victoria)**

.Net developer and systems administrator. Worked to develop .Net services for AOL, Microsoft and Ebay

**Environment/Packages**

Developed on PCs in VB & VB .net, Java script, ASP and SQL. Environment was Windows, and Linux through a variety of browsers and environments.

**Achievements**

Developed a complete logging system that allowed all applications including remotely deployed ones to log errors centrally, and that monitored network stability, and alerted critical personnel if any part of the network was down.

Successfully took over administration of the entire local infrastructure including training myself in firewall, Mail, News and DNS management without any external support.

Acted as primary language resource for the entire office, providing guidance in everything from Java script command syntax through to principles of object-oriented development and database access.

**September, 2001 to December, 2001**

**I Think Online (Carlton, Victoria)**

Web Programmer. Worked as a programmer developing code for dynamic web sites.

**Environment/Packages**

Developed on PCs in VB, VB script, Java script, ASP and SQL Procedure language. Environment was Win NT, and Linux, with testing on a variety of platforms.

**Achievements**

Took over a complex dynamic web site as my first external project. Completed it successfully despite starting with little knowledge of Java script or ASP. Trained myself in SQL Procedure Language, and became familiar with the idiosyncrasies of SQL Server

**August, 2000 to September 2001**

**Open Software Associates (Box Hill, Victoria)**

Software Engineer. Worked as a C++ programmer supporting development by maintaining, and updating core software libraries within the product. Also involved with quality assessment and verification throughout the product.

**Environment/Packages**

Developed on PCs in C++. Environment was Windows NT, and Unix.

**Achievements**

Developed a Perl XML parser for configuration gathering.

Established appropriate use of code coverage test data, so the lab got real meaning from the testing results.

**January, 2000 to August, 2000**

**Optiscan (Clayton, Victoria)**

Software Engineer. Employed as a C++ programmer working on the support software for a medical imaging device. The work mainly involved coding real time interfaces between hardware and display software.

**Environment/Packages**

Developed on PCs in C++ using MFC and Microsoft's STL. Environment was Windows NT

**Achievements**

Developed modular data processing path allowing easy reconfiguration for a variety of circumstances.

Developed comprehensive test suites to prove code viability, and to allow testing of time-critical components. As part of this I used my background in chaos theory to develop a precise model to simulate real world data errors for optoelectric hardware according to rigid statistical patterns and probability theory.

**April, 1998 to January, 2000**

**Cybergraphic Systems (St. Kilda, Victoria)**

Software Engineer. Employed as a C++ programmer working in inter-system interfaces and then Debugging on a large and complex user interface.

**Environment/Packages**

Developed on PCs in C++ and Visual Basic. Environment was Windows NT

**Achievements**

Developed parser and translator to convert from an external mark-up language to the internally used language.

Streamlined deployment process to minimise errors, and to optimise debugging.

**April, 1997 to March, 1998**

**Bureau of Meteorology, Research Centre. (Melbourne, Victoria)**

Graphics Systems Support. Employed as a graphics programmer to provide better ways of viewing data for scientific research. The job also included PC support work as soon as people discovered I had skills in that area.

**Environment/Packages**

Developed on SGI systems in graphics environments such as IDL, AVS, VIS 5D, and GRADS. Incidental programming in C, C++ and Fortran. Environments included Irix 6.4 Unix (SGI), PCs, Cray YMP Unix, and NEC Unix.

**Achievements**

Managed to co-ordinate the production of a set of 10 animated videos for the opening of the new super-computer centre. Having responsibility for the graphics, I had to co-ordinate the efforts of five independent groups and extensively advise management on the options available.

Managed to improve the use of computer facilities in the bureau by developing reusable code, and broadly usable packages (instead of the one-shot, single purpose code that was previously the standard.)

Lead the development of new viewing technologies, now widely used in weather display world-wide.

**March, 1996 to March, 1997**

**AES Prodata Pty. Ltd. (Prahran, Victoria)**

Embedded Software Development. Employed as a software engineer, developing code for 680x0 controller boards. Working at both the embedded software level, and at driver level, with occasional hardware analysis also.

**Environment/Packages**

Developed on 680x0 based controller boards for OS/9. Worked mainly in C, developing on Unix and OS/9 platforms. The work also required an understanding of telix, and other communications tools, Lotus Smart Suite, and the Windows environment.

**Achievements**

Demonstrated clear aptitude in revision control systems, CASE tools, document management systems, and requirement specification systems. This allowed me to produce more reliable, and well documented code.

Learned the fundamentals of a new operating system in under two weeks, allowing me to get deeply involved in code optimisation, and driver design.

**April, 1995 to March, 1996**

**Datatask Pty. Ltd. (Dingly, Victoria)**

Multimedia Development. Initially employed as a support programmer and graphic artist for a 7 person team developing training software for Microsoft Word and Excel. Later led a two person team in the development of a Microsoft Access training package. This was while still providing code support for the other 5 programmers.

**Environment/Packages**

Developed on IBM PCs in Windows 3.11. Worked mainly with Toolbook, 3D Studio, 3D F/X, Corel draw, Corel Paint, Paint shop pro, and Grasp.

**Achievements**

Managed to significantly improve the speed of the development team by the design of useful tools, and utilities. Learned Toolbook in 2 weeks to a level better than any other person in the company.

Successfully managed the development of the MS Access training software. Quoted for the project, managed it from start to finish, and delivered it on deadline, and in budget.

**February, 1995 to April, 1995**

**Daturloc (Leongatha, Victoria)**

Conversion Programmer. Taken on as main programmer for a small business starting into multimedia and Pay-TV development.

**Environment/Packages**

Developed on IBM PCs in OS/2 porting code from an AS400 system. Worked in Borland C++.

**Achievements**

Impressed my employer with my ability to learn new languages. Wrote a suite of useful utilities that enabled the project to be completed on deadline.

**November, 1994 to February, 1995**

**Monash University, Gippsland Campus (Churchill, Victoria)**

Database Programmer. Taken on as a casual to develop a personal scheduler for the lecturers of the computer department. Worked as analyst, designer, and programmer for the project.

**Environment/Packages**

Developed on IBM PCs in Windows 3.11. Development work was done in Microsoft Access, and Excel. Also used HDK, and various graphics packages.

**Achievements**

Successfully redirected a project that had been off course. Established the clients goals, and developed a system that accurately fitted the requirements.

**October, 1992 to April, 1993**

**Ray Drummond Golf Shops**

**Traralgon, Victoria**

Senior Programmer/Systems analyst. Designed and coded a database system for personalised club fitting.

**Environment/Packages**

Developed on IBM PCs in Windows 3.1. Development work was done Paradox.

**Achievements**

Having been called in to help on a collapsing project, managed to bring it to a point of readiness where the junior programmer was able to complete it unsupervised.

**September, 1990 to November, 1990**

**Rod Irving Electronics (Ringwood, Victoria)**

Graphic Designer/Desktop Publisher. Worked on designing, and laying out an electronics parts catalogue.

**Environment/Packages**

Developed on Apple Macintoshes.

**Achievements**

Having been brought in with no previous DTP experience, learned the tools and tricks in the first week.

**May, 1989 to March, 1990**

**Beam Software (South Melbourne, Victoria)**

Junior Games Programmer.

**Environment/Packages**

Developed on Nintendos, and Commodore 64s. Programming in 6502 assembly code on a suite of in-house tools.

**Achievements**

Wrote an 8k assembly code routine on paper, and had it run correctly on my first try after typing it in.

## Education and Personal Highlights

### **Monash University, 1994**

#### **Churchill, Victoria**

Scored 99% in Computer programming 3 despite having to learn Object Oriented Programming for the first time (Most other students had prior experience in object oriented programming, and the course expected that experience.)

### **Monash University, 1993**

#### **Churchill, Victoria**

Worked with a fellow student to produce a patient database system for a local GP. The project was rated as commercially viable by the assessing staff.

### **At Home, 1985-1986**

#### **Ridgeway, Tasmania, and Churchill, Victoria**

Wrote a commercial computer game for the Commodore 64. Wrote initially in pure machine code, before writing my own assembler/disassembler to assist me. Developed the game at a cost of less than \$50 in supplies and software by writing my own development tools.

### **High School, 1982**

#### **Taroona, Tasmania**

Placed 5<sup>th</sup> in all students in Tasmania in the National Maths Competition. (Awarded a distinction result in '81, and '83)

## Personal Data

I prefer to live in Melbourne, but am happy to travel elsewhere when necessary. I spend much of my spare time working on developing techniques in VR and procedural generation of content for games. I am sometimes over fussy about the quality of my finished results, but I work well to deadline, and am not adverse to irregular working hours when necessary. I will accept contract positions if the work looks interesting.

## Referees

No referees are listed on this version of the resume. Call or email me for current referees or for a copy of the resume including referees.

## Summary of Capabilities

**(These are the fields I have covered in my personal studies and work history. My skill in these ranges from extremely good in C and C++ programming to low levels of familiarity in LAN communications)**

Programming in C++, C#, C, Pascal, Basic, VB-Script, Java-script, Cobol, Fortran, Paradox, Foxpro, DBase 4, SQL (MS-SQL Server, Ingress, and Oracle, both independently, and as embedded code), IDL, Prolog, Lisp, Logo, AVS, Java, Vis 5D, Grads, Assembly code on the MIPS, 680x0, 80x86, Z80, 6800, and 6502 chip sets, Toolbook, and Access Basic, Rexx, Unix Perl, Bash, Csh and Tcsh Scripting

Programming for the web including HTML, XML, XSLT, Javascript, jQuery, CSS etc.

Programming for local and distributed frameworks, including html deployment, .Net services, WCF, etc.

Programming for .Net, including MVC, WCF and WPF

Programming for Windows, OS/2, OS9, Linux, UNIX, and DOS environments and for the embedded environments on Xbox and PS2 games platforms.

Programming on IBM PC, XBOX, PS2, Commodore Amiga, Commodore 64, Nintendo, HP9000, HP3000, VAX, DEC, CRAY YMP3, NEC, SGI and 68000 embedded controller.

2D and 3D data processing, including high speed 3D modelling, data modelling for graphical and scientific environments and physics modelling for games environments.

Structured, and Object Oriented Design.

Embedded Software Engineering

Mathematical systems including data encryption and compression, physics simulation and others.

System Development Life Cycle and other Formalised Development Approaches.

Graphic Art Skills (Corel Draw, Fractal Design Painter, 3D F/X, Lightwave, Imagine, 3D Studio, Bryce 3D, bitmap editors etc.)

Desktop Publishing.

Revision Control Systems, and Application Testing Methods.

Artificial Intelligence Programming.

Data Communications, including LAN and Internet.

Digital Electronics Design, Assembly, and Error Analysis.

Analogue Electronics Assembly and Basic Design.

Basic Accounting.

Basic Optics, and Confocal Microscopy.

Project Management.

Business Communications, including Client Liaison, Public Speaking, and Staff Training.

Teaching Computer Related Subjects.

Graphic Design and General Art skills.

Familiarity with a huge range of software for PC, SGI, Amiga etc.

Basic Blacksmithing