EMPLOYMENT HISTORY

Feb. 2005 - Current
Position:
Work involvement:

AKAI Digital Technology Group, Cambridge, UK.
Senior Engineer.
New office setup responsibilities. Workstation installation, server and network setup. Interviewing duties for potential team members. Determination of group development practices (style guides, documentation systems, unit test system). Development for multi-track digital recorder on multi-mode workstation synthesiser (C++). Initial studies for design of novel audio processing network. Design and implementation of several product UI dialogues, screen illumination controller, track looping controls subsystem, track information display, clock display, utility display (Linux, C++). Implementation of Power control PIC software (C). Keyboard interface to application event loop.
Agile (XP based) development methods inside small team. Version control using *SubVersion*, unit tests in *Aeryn* test harness, signals-based class design (Boost and STL libraries), integration of third party libraries into build environment, make & build script design, library usage documentation.
Project management responsibility for three products employing a common CPU board: electronic hardware design and review. Management of external subcontractors: verification of externally produced design material (schematics, PCB layouts) and prototype products. Prototype construction and test: component specification and verification. Pre-production material assessment and correction. Effective crisis management to bring products to market on time: subsystem delivery co-ordination for production. Co-ordination of geographically separated teams.

Sep. 2003 – Jan. 2005
Work involvement:

Full-Time Parenting Duties.
Full time parenting duties for my two sons. I am no longer responsible for their daily care. Part-time employment in electronics repair and servicing.

Jan. 2003 – Aug. 2003
Position:
Work involvement:

SONIC Blue Inc., RIO division, Cambridge, UK.
Support Engineer.
Technical support and repair activities for advanced MP3 car audio player. Customer service and fault diagnosis. Alpha tester for initial software releases.

Dec. 2001 – Aug. 2002
Position:
Work involvement:

Philips RCS, Leuven, Belgium.
Consultant Software Engineer.
Design and implementation in Java of integrated application GUIs and associated visual components ("widgets") in Personal Java (1.1.8) target environment. Research into graphical toolkit choices. Direction and instruction of GUI visual design team. Rationalisation of component set; determination of component affordance and usability. Cataloguing and documentation of basic visual component set. Modelling, design and implementation of component renderers according to consistent product "Look and Feel" scheme. Optimisation and debugging renderers for speed, size and reliability.

Apr. 2001 – Nov. 2001
Position:
Work involvement:

AOT BV, Amsterdam, The Netherlands.
Consultant Software Architect/Engineer.
Consultancy on process management, documentation and development procedures. Mentoring of business specialists. Use-case based specification and analysis for position management server component of financial markets dealing system; UML based modelling using RUP (Rational Rose). Analysis of architecture of underlying system (CORBA based). Recommendations for revision. Design study for new system architecture. Introduction of iterative development methods and planning. Development of documentation templates for development group.

Dec. 2000 – Feb. 2001
Position:
Work involvement:

Irdeto Access, Hoofdorp, The Netherlands.
Consultant Software Architect/Engineer.
Consultancy on the design of a Web-server based client statistics reporting system for satellite television broadcast. Specification and analysis for embedded web client in set-top decoder box. Use-case based specification and analysis of the back-end server architecture. UML based modelling using RUP (Rational Rose).

May.'99 – Nov. 2000	**Philips Business Communications,** Hilversum, The Netherlands.
Position:	Consultant Software Architect/Engineer.
Work involvement:	

Consultancy in issues related to the use of IP based networking. Educational and lecturing duties to staff members on the design of IP based networking applications. Advisory duties to staff members relating to Object orientated design and analysis, CMM, application design. Troubleshooting of a variety of network-related implementation problems in a current design.

Re-factoring and re-design of TCP/IP server subsystem of current exchange system software. Analysis of design problems resulting from complex failure modes; recommendations for revision; implementation of limited changes for reliability; recommendations for BSP tuning to improve memory management and data throughput.

Design study for major system concept to replace current proprietary link protocol (over ISDN) between exchange and proprietary feature telephone to allow the delivery of feature content to ordinary phones. Presentation and lecturing on a web-enabled exchange control & access concept using HTTP, plus various associated application concepts using the same infrastructure (trunk monitoring, configuration & maintenance). Preparation of feasibility and detail design studies. Concept detailing and revision. Preparation of demonstration application.

Design and implementation of first product for test marketing using client-side DHTML in web browser (JavaScript & HTML), and server-side CGI application in PERL using an embedded interpreter (MOD_PERL under Apache HTTP web server). This concept has now been adopted by Philips as the major technical and product development thrust for the future within their SOPHO exchange system, and is regarded as having extended the useful market lifetime of the product. A European patent is pending on the basis of this concept.

Extension of OO skills by further training using UML notation and Rational RUP process.

Dec.'97 - Apr. '99	**Chisholm-Roth & Co. Ltd.,** London, UK.
Position:	Consultant Software Engineer.
Work involvement:	Design & development of TCP/IP based networking components for Windows-based Financial markets dealing simulation program. Design and implementation of Installation program. Documentation. System administration duties.
June '97 - Dec.'97	**PEEK Traffic BV,** Hilversum, The Netherlands.
Position:	Consultant Software Engineer.
Work involvement:	Design, implementation and test of traffic control system components for Glasgow City traffic management system.
August '96 - May '97	**McCOMM International BV,** Utrecht, The Netherlands.
Position:	Senior Software Engineer.
Work involvement:	Application development for Credit Calling System (CCS). Design of C++ classes and implementation. Initiation of documentation control and software CM procedures.
Feb. '96 - July '96	**Siemens ATEA NV,** Herentals, Belgium.
Position:	Consultant Software Engineer.
Work involvement:	Analysis, component design and implementation for ATM switch system. Integration testing. Subsystem test specification.
Sept. '95 - Jan. '96	**McCOMM International BV,** Utrecht, The Netherlands.
Work involvement:	Application development for automated call distribution system (ACD). Conceptual design of C++ classes and implementation. System administration duties.
April '92 - June '95	**AGFA-Matrix Europe BV,** Amersfoort, The Netherlands.
Work involvement:	Application development for real-time medical image acquisition system. Technical support and documentation.
Dec. '91 - Mar. '92	**Charles Sell Advertising Ltd,** Dorking, UK.
Work involvement:	Specification and installation of typesetting system for small-scale publishing.
April '90 - Nov. '91	**Intravascular Research Ltd.,** Putney, UK.
Work involvement:	Hardware and associated real-time software design for Ultrasound medical imager. Device drivers, application libraries, high-speed circuit design
Sept. '88 – Jan. '90	**M.Sc. in Electronics, Queen's University of Belfast,** Belfast, UK.
Work involvement:	A 12 month course, 6 months taught to examination, 6 months design project for dissertation. Course specialisation details available on request..
May '88 - August '88	**Philips TMC,** Eindhoven, The Netherlands.
Work involvement:	Software design and development, video frame capture applications, customer contract design work, desk-top publishing applications.
Oct. '87 - Mar '88	**Optical Storage International,** Eindhoven, The Netherlands.
Work involvement:	Hardware and software design, interfacing and high-speed data acquisition for CD-V video/audio disk quality testing.
May '87 - Oct. '87	**Philips TMC,** Eindhoven, The Netherlands.
Work involvement:	Software design and development, PC-based systems specification to customer requirements, installation and trouble-shooting, CAD, customer demos and teaching.
Feb. '86 - May '87	**Philips USFA BV,** Eindhoven, The Netherlands.
Work involvement:	Software design and development, high-frequency PCB design, remote telemetry applications.
Sept. '82 - Jan. '86	**GEC Telecommunications Ltd.,** Darlington, United Kingdom.
Work involvement:	Embedded software design for telephone applications, hardware design, high- and low-level telephony applications development, test methodology, production trouble-shooting. Environmental test process. Wave soldering process development for surface mount; PCB design.