**Stuart Squibb**

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**Profile**

* Ability and reliability demonstrated by a track record of ongoing contract extensions and offers of permanent employment.
* Many years’ contract experience of real-time C and C++ software development: most recently medical robotics and high grade cryptography
* Experience in a wide range of fields, including user-interface design, embedded systems, multi-threaded financial systems, real-time communications, and high speed video.
* BSc (Hons) in Mathematics from University of Kent at Canterbury.
* Design, implementation, testing and support of both large and small-scale projects.
* Understanding and use of analytical skills to solve intractable problems in the team.

**Contract Positions**

**November 2017 to December 2018 Cambridge Medical Robotics**

*GCC C/C++, Agile, Jira, TeamCity, Klocwork, OnTime RTOS, Ceedling, Python, Medicalisation, Development, Kinematics*

Worked on the firmware to control a surgical robotic arm, initially involving medicalisation of existing software to IEC 62304 software standard; then bugfixing and testing the firmware.

**April 2016 to October 2017 Ultra Electronics**

*Embedded Linux, Agile, GCC C/C++11, Eclipse, Google Test, UML, Doors, secure comms, X509, cryptography*

Implementing Linux software on an embedded Xilinx platform for secure voice communications in an Agile project.

**September 2015 to March 2016 GEC Transport Ltd**

*Visual C++ 2010. Win32 Embedded, MFC, C, C#, TCP/IP*

Implementing embedded Windows CE software to monitor and control electronic rail signalling equipment. Developing test software in MFC/C++ and C#.

**May 2013 to end December 2014 Glasswall Systems Ltd**

*Visual C++ 2010. Win64, Win32, Linux. C, C++11, TFS. Perl, GCC Linux*

Extending a C-based cross-platform anti-virus product to scan and cleanse Microsoft Office documents of potential threats. Implementing a Perl script to generate C and C++ code to read, analyse and write document data structures. Responsible for integrating C++ code into a C product and guiding the development team in using the C++ language.

**August 2004 to end September 2012 Thomson Reuters Ltd**

*Visual C++ 2003, 2010. VSS, SVN, SAMI. Perl, Windows Server 2003, 2008.*

Design, implementation and support of multi-threaded C++ applications to provide financial data to trading institutions. Porting the base infrastructure of a multi-threaded application from Solaris to Windows. Reused the low-level infrastructure to develop a delayed-data system for entry-level market information. Support and maintenance of these applications and migration to a more performant 64-bit Blade-based platform.

**October 2003 to August 2004 Siemens Transportation**

*Rational Rose RealTime, UML, Clearcase, C++, Transportation system*

Design and implementation of train location equipment interface modules for a GSM-based rail network communications system.

**April 2001 to October 2003 Keymed Ltd**

*C, ARM, RTOS, Embedded, High speed video camera, User interface design*

Providing the user interface for a high speed video camera. This involved writing the low level graphic primitives for the camera, then designing and implementing its user interface.

**October 2000 to April 2001 Marconi Communications**

*Unix C++, PSOS, Embedded, telecommunications, Rational Rose RT, Clearcase*

Designing, developing and testing the command message routing component for embedded software to control fibre telecommunications equipment. Also porting and integrating legacy communications code from previous products.

**March 1996 to September 2000 Schlumberger Industries**

*Microsoft Visual C++ 6, Win32, MFC, Oracle, PL/SQL, UML, Smartcards, Clearcase,*

Repeat contract, developing Windows software to provide an electricity prepayment vending system, using Smartcards to transfer transaction and configuration data between intelligent meters and a distributed database using Oracle and PL/SQL.

**April 1995 to February 1996 PI Technology Ltd**

*Microsoft Visual C++, MFC, COM, Win32, Visual BASIC*

Design, prototyping in Visual Basic and implementation in Visual C++ of the user-interface of a vehicle analysis program. This program allows the configuring of a haulage vehicle and analysis of its simulated performance over definable terrain and road conditions. Responsibilities included designing the initial user interface and incorporating minor modifications requested by the customer.

**Earlier Contracts (1983 – 1993)**

During my early contract years, I worked for various companies, mostly in communication and control using real-time embedded software with some user interface design.

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| Jan 1993 - Jan 1995 | Schlumberger Industries | Metering systems. *Microsoft Visual C++, MSDOS, PVCS, PC-Lint, Microsoft Office* |
| May 1990 – Jan 1993 | Rank Xerox,  Ventura Software | Product localisation*. Microsoft C, Windows SDK, OS/2 Presentation Manager, Intel 8086 Assembler* |
| Jan 1990 – Apr 1990 | Racal Avionics | Avionics. *IBM PC, MS-DOS, Microsoft C* |
| Mar 1988 – Dec 1989 | Marconi Communication Systems | Telecommunications. *IBM PC, MS-DOS, Turbo Pascal* |
| Jan 1987 – Feb 1988 | Marconi Space Systems | Telemetry*. IBM PC, Microsoft Pascal, Intel 8086 Assembler* |
| Aug 1986 – Jan 1987 | RamJam Corporation | Games. *Zilog Z80 assembler, 6502 assembler, Basic* |
| Feb 1986 – Aug 1986 | Coin Controls Ltd | Production control. *CP/M, Pascal, Z80 assembler* |
| Apr 1985 – Nov 1985 | High Integrity Systems | Embedded systems. *Intel 8039, 8051 assembler, RMX, ISIS, ICE* |
| Nov 1984 – Apr 1985 | Owl Micro-Communications | Communications. *Apple 2, UCSD Pascal, 6502 assembler* |
| Jul 1984 – Oct 1984 | Burroughs Machines | Office automation. *Algol, Burroughs B6800, MCP, GEMCOS* |
| Feb 1984 – Jul 1984 | Network Technology | Office Automation. *Intel Pascal, RMX* |
| Sep 1983 – Feb 1984 | Owl Micro-Communications | Communications. *Apple 2, UCSD Pascal, 6502 assembler* |

**Permanent Jobs**

**February 1982 to September 1983 Owl Micro-Communications Ltd**

*Communications. Apple 2, UCSD Pascal, 6502 assembler*

Development of software to allow Apple 2 to emulate various types of communications terminal including Prestel Viewdata and IBM 3270, 3780.

**April 1979 to May 1981 Burroughs Machines Ltd**

*Burroughs B6800, MCP, ALGOL and variants*

Support and customisation of Burroughs B6800 mainframe operating system, compilers and other system software.