

# **CIRRICULUM VITAE**

## **PERSONAL DETAILS**

**Name** Ian Cowburn  
**Contact Details** *Available on request*

## **TECHNICAL SKILLS**

C; TCP/IP; BSD Sockets; UNIX; C#; C++; Windows; PL/SQL (Oracle); Ada; object orientation; UNIX-shell scripting; source control.

## **SOFT SKILLS**

Mentoring; communications; team work; problem solving; flexibility.

## **EMPLOYMENT HISTORY**

### **Ultra Electronics Air Systems**

Jan 2006 – Present Ultra Electronics Airport Systems, The Oaks, Crewe Road,  
Wythenshawe M23 9SS

### **Projects**

#### **Baggage Reconciliation System**

Main responsibilities are to maintain an old code base as well as the design and implementation of new communications interfaces. These new interfaces involve extensive interactions with customers and third party suppliers regarding the design and operation of new interfaces.

The system runs on a number of UNIX platforms – Solaris, AIX and GNU/Linux – and involves a mixture of C, C++, PL/SQL and Pro\*C code on the server, all of which I am involved with day-to-day.

Other coding responsibilities involve implementing new features in the hand-held scanners used by the project. This involves low-level Win32 programming on the Windows Mobile platform.

Further responsibilities involve the diagnosis of existing problems raised by the old code base. This invariably relies on low-level diagnostics techniques, such as the *dtrace* interface on Solaris and packet sniffing; either using *Wireshark* or UNIX tools such as *tcpdump* and *snoop*.

This system is in use at a number of major airports including Heathrow, Zurich and the South African airports.

The South Africa installation was commended by the customer for being the most reliable computer system in use at the airports during the World Cup tournament, 2010.

## **Thales**

Jan 1993 – Jan 2006 Thales (Services Division), Ashurst Drive, Bird Hall Lane,  
Cheadle Heath, Cheshire SK3 0XB

### **Projects**

#### **RTTI (Real Time Train Information)**

This project involved me as part of the small team developing the Association of Train Operating Companies (ATOC) Live Departures website. The system was a 3-tier system implemented as a number of different services utilising .NET and Win32 in C#, C++ (both managed and unmanaged) and ASP.NET.

Primary responsibilities for this project were the design and implementation of Windows services in C#. These services communicated with the central server using .NET remoting, allowing the information collated for the website to be presented to external clients using XML over TCP/IP. This information was used to provide up-to date train information for 3rd-party telephone, WAP and SMS services.

Secondary responsibilities were implementing the ASP.NET code behind the web pages, as well as general development on the server side.

Further responsibilities were the diagnosis and fixing of faults reported by end users throughout the system.

This project has been a success with both the customer and the public, winning Innovation of the Year at the National Rail Awards 2004.

#### **Connex – Customer Information System** **Hong Kong MTR – Telephony GUI**

Both of these projects involved designing and writing GUI components using Tcl/Tk, with a C code base behind to communicate with the server using CORBA.

The Hong Kong project involved 3 months on-site working.

#### **COP3**

This was a Command and Control system for the Singapore Police and Civil Defence (fire) Forces.

Primary responsibilities were the design and implementation of numerous message handlers that interfaced with other vendor's systems using TCP/IP on a HP-UX platform and written in C.

Other work involved other server-side sub-systems that incorporated database handling using an in-house Oracle interface. I was also responsible for completing custom tools used to import the data from the legacy system to ours in Pro\*C.

During this period I demonstrated flexibility by spending time in Singapore in 1, 3 or 6 month periods acting as an integrator (interfacing with the French and Singaporean software teams), fault fixer and on-site, on-call support.

#### **HPB/AGR**

My initial project was the plant control software for the Hinkley Point B nuclear reactor. This was written in Ada, running under OSF1 on DEC Alphas.

Primary responsibility was the design and implementation of an offline subsystem which allowed display screens and plant inputs to be tested on a simulated live system controlled by the offline design software remotely over a TCP/IP interface. The software was also required to maintain a multiple-user environment where users could not interfere with each other's work, and the generation of automatic testing scripts for certain components and display formats.

My other main function was the initial integration of the software (which was authored on a specialised Rational Ada machine) on the target platform.

## **EDUCATION**

**1987-1990**

Polytechnic of Central London  
(now University of Westminster)  
104 New Cavendish St  
London W1

BSc Science (Computing) 2-2 Hon.

## **OUTSIDE INTERESTS**

Football (watching and playing), music (playing guitar and using PC based music generation software), the physical sciences and video games.

I also enjoy coding for pleasure and have written a number of open sourced software utilities and simple games. Examples can be seen at <http://www.noddybox.co.uk/> and <http://www.sf.net/projects/wadmangle>