

CURRICULUM VITAE – ANDREW R DALE

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Date of Birth 28 September 1966

Nationality British / English

Driving Licence Full clean car licence held since 1988

Qualifications CEng Institute of Engineering & Technology **July 2005**
BEng (Hons) Degree Electrical & Electronic Engineering **June 1994**
HNC Electronic Engineering & Computer Technology **August 1990**

Skills and Abilities

- Experienced Software Developer & System Integrator using Visual Basic, .NET & SQL Server.
- Worked with various computer systems, software, databases and programming languages.
- Integrate computer systems, machinery and 3rd party software for statistical process control.
- Extensive technical knowledge acquired working in IT and engineering-related industries.
- Maintain a good working knowledge of the latest innovations in science and technology.
- Enthusiastic, confident, show initiative when working either on my own or in a team.
- Willing to travel, eager to learn and easily adapt to new ideas, situations and environments.
- Liaise well and create a good working relationship with clients, employers and staff.
- Publish & maintain my own website, network, PC's, servers, workstations & software.

Hobbies and Interests

In my recreational time I enjoy scuba diving, swimming, cycling, weight training, photography, genealogy, computing, cinema (Sci-Fi and Action), militaria, socialising and travelling. To date I've toured, Australia, Canada, Central America, Europe, India, South Africa, Thailand and the USA. As a keen diver I regularly visit the Egyptian Red Sea and have dived Australia's Great Barrier Reef, Sudan, UK and Belize's atolls & reefs. I also enjoy motor racing, spectating at the F1 & Le Mans 24 hour and Classic Grand Prix.

Career Aspirations

I have a natural curiosity in technology and an ambition to develop my skills in the computing and engineering industries. I enjoy working in exciting, challenging environments and would like this to continue to be an integral part of my work.

Previous Experience

Software Engineer, Advanced Desktop Systems, London

Nov. 2004 – Feb. 2009

I was contracted to develop a windows based client-server monitoring system for Web Farms, Power & Building Management Systems (BMS). The monitoring system communicates, controls and records data from: security, card access, power consumption, switches, voltage, current, temperature, humidity, HVAC and server status devices and sensors. I used Visual Studio 2008 to upgrade existing VB6 applications to VB.NET, created a Windows Service to manage communications via various remoting channels (IPC, HTTP & TCP), developed applications and GUI's for both windows and web platforms using VB.NET & ASP.NET and implement Web Services to retrieve and display data from sensors and databases. Microsoft .NET 2.0 & 3.5 were used to create: GUI's, drivers, real time data acquisition and data processing applications. Various protocols and methods were used to communicate with bespoke systems including: SNMP, SMTP, Modbus, TCPIP, UDP, Compass, AxxessID, Hawki, RS232 & RS485. Telemetry data was handled using ADO with MS SQL Server & Access databases. VS9 was used to package and distribute the completed system. VSS was used for documentation and version control.

Software Engineer, Exitech, Oxford

Aug. 2005 – July 2006

Contracted to develop and integrate various applications for the control of Robots, Lasers and Imaging Systems for the electronic & semiconductor manufacturing industry. Projects included the imaging, control & automation with various mechanical & piezoelectric stages to sub-micron precision on the RIM (Reticle Imaging Microscope) a high resolution EUV (Extreme Ultraviolet 13.5nm) imaging tool for resist exposure and aerial image monitoring. Developed & tested applications in class 10/100 clean room environments to reduce contamination for 'in vacuum' components. Visual Basic was used to create GUI's, drivers and to control components, MIL 8 (Matrox Imaging Library) was used to develop several machine vision applications to align fiducials and focus reticles. Skills used: VB, OOP, OCX, DLL, VSS, MIL 8, MS Office & Windows XP.

CURRICULUM VITAE – ANDREW R DALE

Analyst Programmer, Barclays Bank, Coventry

Oct. 2003 – Sept. 2004

Contracted to develop business software for a large financial institution. I worked as part of a professional development team consisting of Analyst Programmers, Web & Database Developers. I developed and enhanced applications for the Bank's Management Information Systems. I created: GUI's and business rules for the n-tier system using Visual Basic; tables and stored procedures using Transact SQL; relational database with SQL Server; tested functionality; supported system / user acceptance testing and role out of the applications the full application lifecycle. Skills used: VB, OOP, VBA, VSS, COM, DLL, OCX, ADO, API, HTML, IIS, SQL Server, T-SQL, Link Servers, MTS, Install Shield, Test Director, Access & Excel, Windows NT4 & 2000.

Software Engineer, Reality Group – Great Universal Stores, Worcester Mar. 2004 – May 2004

Contracted to enhance an existing web based reporting system and an electronic registration application that imports personal data collected by hand held devices to an IBM mainframe using screen scraping. Skills used: VB, OOP, Attachmate Extra!, MS Access & Excel, API, VSS, HTML, VBScript, IIS, ASP & Windows NT4.

Analyst Programmer/Tester, Lloyds Bank TSB, Birmingham

Aug. 2003 – Sept. 2003

Contracted to verify that developed financial applications achieved customer specification for the Bank. I created test scripts, audited code, tested procedures & GUI functionality, advised on solutions when dealing with operating systems, data acquisition & compatibility issues. Skills used: VB 6, OOP, VSS, SQL Server, T-SQL, Crystal Reports, API, ADO, OLE DB, HTML, CSS, ASP, VBScript, IIS, Windows NT4 & 2000.

Software Engineer, E-SQUARED Ltd, London

Jan. 2001 – Nov. 2004

Contracted to develop a various software applications for the Building Management, Security & Access Systems industry. Projects included developing a client-server based supervisor, contact management system and a bespoke tenant billing system. As the senior software engineer I oversaw the full development lifecycle of the applications, liaised with clients, generated project specifications and timescales, analysed tasks, coded applications, amended and debugged previously developed applications, tested software and hardware systems and gave after sales support including training and technical support. As a developer I used Visual Basic 6 to create GUIs, drivers, real time data acquisition and processing applications. MS SQL Server and Access were used for data storage on single & multiple-tier systems. Reports and graphical representations of data were created using both WEB and MS Office applications. The projects required a good understanding of real time data acquisition and system integration enabling the computers to communicate with third party systems (Trend, Echelon, Lonworks & Compass) using various protocols (RS232, RS485, TCP/IP, Ethernet, SMTP, Modbus & SNMP), techniques & interfaces. Skills required: VB6, OOP, VBA, ActiveX, COM, DLL, Win32 API, RDO, ADO, SQL Server, T-SQL, VSS, MS Access & Excel, IIS, ASP, Dreamweaver, Windows NT4, 2000 & XP.

Software Engineer, BRITISH AMERICAN TOBACCO, Southampton

Feb. 1999 – Oct. 2000

Contracted to design, develop and commission a system to automatically record statistical, runtime and quality information from high speed production and inspection equipment for statistical process control. The systems design required integrating various components with unique protocols on several platforms. As the senior system integrator I oversaw the full application lifecycle, liaised with senior management and shop floor workers and gathered system requirements. I coded all applications, tested, commissioned and supported the finished system. Visual Basic was used to create GUIs, integrate proprietary software and hardware systems, extract and collect real time data for statistical analysis, store data on SQL Server and Access databases. Statistical reports and graphs were produced using MS Excel and HTML. Other skills used: VB 3 - 6 (16/32 Bit), VBA, ActiveX, OCX, COM, DLL, DDE, OLE, ODBC, RDO, ADO, RS232, SPC, TCP/IP, Ethernet & DecNet, Access, Excel (pivot tables), Minitab, Front Page, ASP, IIS, HTML, SQL Server, T-SQL, Win 98 & NT4 Server.

Software Engineer, MARCONI / GPT CARD TECHNOLOGY, Coventry

Nov. 1997 – Dec. 1998

Contracted to develop a Visual Inspection & Production Management System for the Smart Cards industry. The visual inspection systems required integrating various machine vision systems & image processing tools with high speed production machinery to accurately detect and reject defective components. The production management system required integrating the current workflow system with the production database to manage the rapid production of smart cards from the ordering process throughout production to despatch. As the senior software developer in a small team of engineers I oversaw the full lifecycle of the applications, liaised with management and shop floor workers, gathered system requirements, coded applications, tested and implemented the finished system and ran staff training. Visual Basic was used to create GUIs, integrate proprietary software and hardware systems, extract and collect real time data for statistical analysis, export data to SQL Server and Access databases. Visual C/C++ was used to create ActiveX interfaces for high speed production equipment. Skills used: VB, VBA, VC/C++, ActiveX, OCX, COM, DLL, DDE, RDO, ODBC, SQL Server, SQL, T-SQL, PLC's, RS232, TCP/IP, optical & lighting techniques, OCV, mechanical & electronic circuit design.

CURRICULUM VITAE – ANDREW R DALE

Applications Engineer, COGNEX UK, Potters Bar

Oct. 1995 – Oct. 1997

Employed in the world's leader Machine Vision Company developing visual inspection & integration applications for the Automotive, Pharmaceutical, Electronic & Telecommunication industries. Applications such as high speed Optical Character Recognition and Verification (OCR-OCV), high accuracy correlation and measurement devices, quality control and component tracking systems. As a developer I used Visual Basic to create GUIs and integration software to control visual inspection systems. Visual C/C++ was used to create ActiveX, OCX interfaces to visual inspection and production systems. I regularly travelled throughout Europe supporting sales staff, evaluated vision applications, consulting system integrators and customers. Assisted in organising exhibitions at various trade shows and designed demonstration systems. Other responsibilities included: maintaining workstation & networks, sourcing software, hardware, lighting, optics, giving technical support and providing on-site training. I frequently attended technical & sales seminars at their US HQ in Boston MA.

Development Engineer, REDIFON – MEL, THOMSON, Crawley

Jun. 1993 – Oct. 1995

Employed in the Communication R&D Laboratory for the Defence Industry. Developed DIRECT a mobile radio direction & location finding system. I analysed component equipment, resolved compatibility issues and coded control software. The design required integrating electronic equipment, embedded micro-controllers, global positioning systems (GPS), fluxgate electronic compass, Doppler RF direction finder, VHF receivers and digital mapping. Developed a man portable spectral occupancy data acquisition and analysis system (MANPACK). This involved writing analysis & control software, designing hardware for an embedded microprocessor & PC104 system, storing & encrypting data, controlling DSP, ADC, AGC, modem, RF synthesiser & filter. Worked on a high power telephoto CCD camera and optics control system.

Design Engineer, THOMSON CONSUMER ELECTRONICS, Germany

July 1992 – June 1993

I worked in the Analogue Integrated Circuit Research and Development Laboratory designing, simulating, testing and documenting VLSI circuits for HDTV, ProLogic & HF consumer electronics communication products.

Software Engineer, CROMPTON LIGHTING, Doncaster

July 1990 – Aug. 1990

I worked in the draughtsman's office developing CAD software using Microsoft C for laptop PC's to assist field engineers in calculating lighting positions, luminance levels and costing on building schemes.

Computer Technician, RESOURCE, Doncaster

Sept. 1988 – Sept. 1989

I worked in an educational computer development company designing, building and testing specialised electronic devices and computer equipment as learning and teaching aids for the local education authority.

Combat Engineer, Royal Engineers, British Armed Forces

June 1983 – July 1988

As a Combat Engineer I trained in many aspects of civil and mechanical engineering undertaking various types of work including construction engineer, troop signaller, demolition specialist, medical technician and combat soldier. I toured the Falkland Islands with the RE, RAF & Gurkhas and Germany with the BAOR.

QUALIFICATIONS & EDUCATION

Professional Training

Microsoft Certified Application Developer MCAD, Microsoft Certified Technology Specialist MCTS WEB .NET 2.0. Microsoft advanced technology courses: Visual Basic, 'C/C++' Object Orientated Programming, 'Software Systems Analysis and Design', Microsoft SQL Server Database Design and Administration, Dreamweaver MX.

CEng IET (Institute of Engineering & Technology)

Sept. 1990 – Present

As a member I regularly attending IET lectures, events and became a Chartered Engineer in July 2005.

BEng (Hons) Degree Electrical & Electronic Engineering

Sept. 1990 – June 1994

I studied at De Montfort University Leicester for my Bachelors Degree with Honours in Electrical and Electronic Engineering. Represented the University in an exchange scheme with Germany's Furtwangen Fachhochschule working for Thomson Consumer Electronics, Analogue IC R&D Laboratories Villingen. I researched Stereoscopic Cinematography techniques and developed a 3D imaging system using analogue electronics & CCD cameras.

HNC Electronic Engineering and Computer Technology

Sept. 1989 – Aug. 1990

Studied at Doncaster Technical College for my Higher National Certificate in Electronic Engineering and Computer Technology. Awarded Distinctions in: Microprocessor Based Systems (Z80, 68xxx, 80xxx), Computer Aided Engineering, Control & Instrumentation Systems & Common Engineering Skills. Merits in: Microelectronic Systems, Electrical & Electronic Principles, Analogue & Digital Electronics, Control Systems Analysis & Projects (Variable Switch Mode Power Supply & Microprocessor Control System).

City & Guilds 726 Information Technology

Sept. 1988 – Sept. 1989

Cantley ITEC: Computers & Computing, Digital Electronics, Electronic Circuits & Components, Word-Processing.