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www.hamm.co.uk

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- Self-employed IT consultant and developer of 30 years standing; 10 years prior experience in commercial and educational computing.
- Director of **neuSoft Ltd**, a company specialising in Neural Network solutions, and interactive physiological monitors.
- Over past 10 years, have worked on diverse desktop and web projects:
 - CMS systems using PHP/MySQL/jQuery
 - Flash Builder (Flex) systems for interactive data presentation and analysis
 - Live data capture and analysis of physiological data using Delphi
 - Server-based Neural Network questionnaire analysis..
- For 20 years up to 2004, worked on clinical data capture, analysis and patient record handling, since 1997 for **BUPA Wellness**.
- Regular academic and other teaching assignments over 25 years

Professional Qualifications

- BA Class 2 (Honours) Physics, Oxford University 1964 (Converted to MA 1970).
- MSc, Low Temperature Physics, University of Ghana, Legon, 1968
- Member of the British Computer Society: 1980
- Chartered Engineer (Engineering Council): 1991

Web Links

- <http://www.hamm.co.uk/>
Personal web site detailing major projects
- <http://www.centreforcities.org/citytracker>
Interactive Flex-based mapping project showing UK unemployment statistics (commissioned by the Centre for Cities)
- http://hamm.co.uk/danproj/ansh_dem/
Stakeholder Relation Management system (username/pw: guest) with dummy data for the Anthony Nolan Trust
- <http://www.hamm.org.uk/cgi-bin/QnaireAjax06.html>
A neural network based predictive system using Flash Builder (Flex) for neuSoft Ltd
- <http://bit.ly/YmyMV8>
Questionnaire Delivery System to feed into neural network analysis (for neuSoft Ltd)

Technical skills

Familiar with a wide range of hardware and software systems and techniques. Recent experience on networked windows-based PCs, Delphi XE, MySQL, SQL Server, Win32 Delphi, HTML, JavaScript, jQuery, PHP and Flash Builder (Flex) ActionScript.

Internet and WWW

- Good grounding in basic Internet technology and Web techniques, through continuous development and research.
- Server-side scripting with **Delphi** and **PHP**. Experienced in a range of technologies – **SOAP**, **CGI** and **ISAPI**. Have worked with **XML**, **MySQL** and **SQL Server** databases.
- Client-side scripting: **HTML**, **DHTML**, **JavaScript**, **CSS**
- Use of **AJAX** and **DOM** manipulation, using JavaScript and **jQuery**, to produce interactive Web applications.

Flash Builder (Flex) skills

- **Adobe Flash Builder 4.5**, **ActionScript 3**, **ILOG Elixir** mapping and display components
- Have completed a number of large scale applications (see below) with server database interaction

Computer languages

- Highly competent in **Delphi/Pascal** (up to **XE**), **HTML**, **JavaScript**, **ActionScript**, **PHP**
- Working knowledge of most mainstream languages and scripting languages

Delphi skills

- Extensive O-O design and programming experience with all Delphi versions upto **Delphi XE**.
- Deep knowledge of **VCL**, and many 3rd-party libraries, including the **Turbopower**, **Jedi**, **Raize**
- Extensive knowledge of **Win32 API** via Delphi.
- Designed and programmed client-server system (see Projects below).

Databases

- Extensive use of **SQL Server 2005** and **MySQL**

Neural networks

- Have collaborated in the construction and deployment of neural networks
- Currently developing tools to support these activities for neuSoft Ltd, of which I am a director.

Design and development

- Well-developed **GUI** design skills, both in conventional and Web-based work. An engaging, robust and intuitive user interface is always a high priority.
- My first concern is always to establish the user requirements, and accept that the users may not be fully aware of these until they have seen the possibilities. The result is an iterative process in which the user is fully engaged. I have always adhered to the tenets of the **Agile Programming** or **Rapid Prototyping** approach to system development.

Professional Skills

- Excellent written and verbal communication skills.
- Co-ordinating the work of other staff, external suppliers and consultants.
- Working with end-users, both in the collaborative design of applications and user interfaces, and in the rapid acquisition of domain-specific knowledge. See also **Design and development** above.
- Flexible and adaptable in a wide range of business and professional environments, including medical, specifically health-screening, applications.
- Deal with highly sensitive data professionally and confidentially.
- Can work independently and autonomously, as well as within a team.
- Accustomed to the demands of a pressurised working environment.

Training and Teaching

- Have given various technical courses, including database training for the US army.
- Regular teaching at West London Institute (subsequently Brunel University) on IT courses until 2001
- Delivered course on Web Programming on NGO-funded course in Zanzibar in 2009.

Key Project work

- Currently working, as a director of neuSoft Ltd, on various physiological monitors and neural network projects, including a Stress Reduction Biofeedback system, and a 24-hour stress monitor, both based on analysis of Heart Rate Variability and other physiological measures. *Delphi XE and Flash Builder*.
- Currently working on Neural Network based project for interactive questionnaire analysis. See <http://www.hamm.co.uk/> for more details. *Delphi XE, PHP, JavaScript*
- Currently developing Web-based contact management system for the Anthony Nolan Foundation. *jQuery, PHP*
- Have recently completed a number of Flex-based mapping projects – see [Web Links](#) *Flash Builder*
- Other Content Management Systems using PHP, JavaScript and MySQL. I have also developed a sophisticated interactive data analysis system based on Flash ActionScript programming.
- A long-running project, up to 2005, has involved design and development of client-server system, running in 33 screening centres nationwide. Supports all data acquisition (manual and automated), client talk-through, lifestyle planning, client reporting, archiving, etc. See BUPA Wellness below. *Delphi 6*.
- Designed and developed a sophisticated medical analysis system to perform dynamic testing of lung, heart, circulation and muscle capacity, using an exercise bike. I subsequently extended this to cover database management, data-entry, client-talk through and reporting.
- Following the takeover of the company by BUPA Wellness, I expanded the above into a suite of software, client-server based, which ran until ~2008 in 33 BUPA Wellness screening centres nationwide, supporting many thousands of transactions per day to a multi-gigabyte distributed database. The system was extremely robust, and virtually maintenance-free
Delphi 6, Turbo Pascal, C++.

Personal Details

- Date of Birth: 19-02-1943
- UK Citizen – full UK Driving Licence.
- Married with four children
- My main recreational activities are music and cycling. I am a member of various local amateur music organisations, was Chairman of Kingston Philharmonia for some years, and in 1999 initiated a summer musical workshop in Tuscany, which I ran on an annual basis for 5 years.
- I have done voluntary work, including the Samaritans, and IT support and teaching language skills for the Kingston-on-Thames Kaleidoscope project.

Project history

I have been self-employed since 1981. I provide a range of services: analysis, design, development, support and strategic advice. I have worked concurrently with long-term clients – hence many of the dates below overlap. The order is roughly descending chronological, with projects for a given client grouped together.

Client	Project summary	Key skills
Various recent projects Ongoing	Design and development of Stress Management Biofeedback system based on Heart Rate Variability and other physiological measures. Work for the Anthony Nolan Foundation, including a Web-based stakeholder management system. Interactive data presentation mapping displays using Adobe Flex 3 and IBM ILOG mapping software Other web-based project work has included both client and server-based technologies,	Delphi XE Web services, SOAP HTML, DHTML, XML, JavaScript, jQuery, CSS, CGI PHP, MySQL, ActionScript, DOM
neuSoft Ltd 2006-	Director of neuSoft Ltd, a company which specialises in physiological stress monitors and neural network solutions. Recent project work has involved the deployment of run-time systems, and the design of frameworks for provision of data for analysis.	Neural Networks Analysis and data handling techniques. Delphi and Adobe Flex development See also <i>Ongoing</i> below
Wellness Technology 2004-2011	Responsible for innovative data analysis and presentation techniques for a company that provides web-based health screening and corporate stress management. Work on data-driven interactive Flash and Flex displays allowing users to carry out advanced data analysis. Web display of neural network analysis.	Delphi XE SQL Server Flash 9, Flex, ActionScript Statistical and other analysis techniques Web, DOM, Ajax
BUPA Wellness (formerly Barbican Health) 1999-2004	Continuation and extension of previous Barbican Health systems. New work comprised vast increase in database size (now multi-GB) and data flow rate; linkage to further equipment; support 30+ sites; true client-server conversion, with multithreaded server supporting 50 simultaneous connections; advanced optimisation and user interface techniques stress testing to 3 months continuous operation; PDF document output. Supervised extra resources as required.	Variety of advanced programming techniques; use of most of the TurboPower and a number of other third-party libraries. Extensive knowledge of NT and 2000 internals. Windows “named pipes” and sockets. Optimisation and testing. Delphi v5-6. Paradox
Barbican Health plc (formerly City Healthcare) 1994-1999	Continuation and extension of previous City Healthcare systems. New work comprised automated linking of multiple sites, conversion to Delphi, design and implementation of stand-alone exercise bike system measuring a variety of physiological measures including ECG, spirometry, gas concentration and flow rate.	Delphi v1-4. Paradox. C, C++. Asynchronous communications. Data management. Real-time programming; further interfacing techniques.
Brunel University, Surrey University 1990-2001	Delivered a variety of HND and Degree-level computing courses, latterly on Networking and Communications, and Comparative Programming Languages	Deepened understanding of networking and communication mechanisms
Various pre-1998	<i>City Healthcare Ltd.</i> Responsible for all IT aspects of startup Health Screening company <i>British Olympic Medical Centre</i> Design, implementation of database and other facilities for managing the Centre's activities. Gather and collate physiological data from Olympic-level athletes to support training schedules. <i>South London Consortium</i> Software suites to measure thermal efficiency of buildings, optimize energy saving measures, etc.	Pascal, Paradox, real-time data acquisition, report writing. Links to diverse equipment (treadmills, rowing machine etc). Pascal. Mathematical optimization techniques.