Nicholas (Nick) R. Hood BSc (Hons)(Open), MRAeS, MInstP, CPhys, CSci   nick@cullaloe.com

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SYNOPSIS

Educator, physicist and software engineer. Broad and extensive experience of internet technologies and data-driven web solutions. International track record in Education, IT, Project Management, Simulation and Training. PhD student.

EDUCATION

Edinburgh University, Moray House School of Education
- PhD student (part-time, September 2014 –)
- PGCE (Secondary: Physics and Mathematics), July 2004

The Open University, Milton Keynes
- B.Sc. (Hons), November 2002

QUALIFICATIONS

The General Teaching Council for Scotland
- Full Registration: **Physics with Science**, July 2005; **Mathematics**, April 2006

The Science Council
- Chartered Scientist (CSci), July 2004

The Institute of Physics
- Member (MInstP), Chartered Physicist (CPhys), July 2003

The Microsoft Corporation
- MCP Charter Member, 1999
- Microsoft Certified Solution Developer, June 2001

The Royal Aeronautical Society
- Corporate Member (MRAeS), August 1999

PROFESSIONAL EXPERIENCE

cullaloe.net *trading as Al Muhandis*, Fife **April 2003 to date**

Sole trader business providing consultancy and technical services.

- Designed and implemented community website for Physics Teachers in Scotland at http://sptr.net using WordPress, PHP, mySQL, Javascript, JSON, WP Plugins including customisation of these
- Implemented and rolled out Project Management System using Ruby on Rails, Redmine, mySQL on Centos 6.4
- Hosting several community and business websites using WordPress, Joomla!, Drupal at http://cullaloe.net
- Set up community sites using phpBB, mySQL (e.g. http://sptr.net/forum)
- Established educational websites using Moodle, Joomla!, WordPress, MediaWiki, ELGG and other suites
- Unix server administration on shared hosting and VPS including configuration, upgrade, extension and scripting of tools

Edinburgh University, Moray House   **August 2012 to August 2015**

Teaching Fellow seconded to lead the PGDE Secondary Physics programme. Also teaching on Secondary PGDE General Science and science strand leader for Primary PGDE/BEd Science.

Fife Regional Council, Education Service   **August 2004 to July 2012**

- Principal Teacher, Physics (Glenwood HS)
- Teacher of Physics & Mathematics (Kirkcaldy HS)
- Teacher of Physics & Mathematics (Probationer, Buckhaven HS)

Cullaloe Project Resource Ltd   **February 1997 – July 2003**

Fixed rate, fixed price and cost-plus contracts for clients, including:

- **The Scottish Centre for Infection & Environmental Health**
  Designed and built the medical reporting system ECOSS using SQL Server 7.0, NT4/IIS, .asp, XML, XSLT, VSS, UNIX
  Designed and built the Quick Response (GP Medical) Surveillance System QRSS using SQL Server 7.0, NT4/IIS, MAPI (Exchange)
  Delivered training and full documentation for users and support staff
- **Purves Plant Hire**
  Design specification for plant tracking/scheduling database application using NT4, Access, Windows 2000
- **West Lothian Council**
  Conversion of Pagemaker 6.5 forms to dynamic Adobe pdf forms
- **Scarlet Training**
  Contract trainer, delivering courses on HTML 4 (Intro and mastering), Java programming, Dreamweaver 4/UltraDev, Adobe PDF programming, Microsoft Mastering VB6 series (Fundamentals, Development, Enterprise, Web App Development), MOC833 SQL Server 7
- **LearningIT**
  Contract trainer, delivering courses in advanced HTML, CSS, Javascript, Java programming, Java for C programmers
- **Aspentech**
  Design analysis & report on the Heysham 2 Process Plant Simulation upgrade
- **Greater Glasgow & Clyde Valley Tourist Board**
  Design and implementation of the visitor information and accommodation booking system website using SQL Server, NT4/IIS, ASP, XLS/XSLT, Javascript, dynamic HTML
- **Deutsche Bank**
  Design and development of Private Clients Investment management system using Access/VB6/NT/Win2K
- **Bull**
  Design and development of Kwik-Fit Insurance call centre suite using Graham Technologies GT-X system, VB6/NT
- **ICL**
  Systems update (Millennium Bug) for tools and utilities using VB4/SQL
- **Anglian Water**
  Support and programming for systems roll-out using VB4/Windows98/2K/NT

GEC Marconi Simulation and Training   **July 1991 – February 1997**

Senior Software Engineer

- GUI application development for auto-initialisation code generation in C
- Designed and coded a fault injection package, real-time process plant simulation models and a developer's toolkit for real-time parameter display
- Using: Microsoft VB 4.0, Access SQL, C/C++, VSS, NT3.51

Data Control Manager

- Software Configuration and Engineering Control, Shajiao , C Power Station

Bid/Project Manager - Military Operations

- Connah's Quay Power Station simulator
- AS 90 and Warrior OPV military vehicle simulator
- Sea King HAR Mk3A Radar Crew Trainer
- CATT Feasibility Study, MECCA/MARCAS IT system feasibility study
- Bids for AFV Turret (Kuwait) and Sea Harrier FRS.2 Maintenance Trainers

IMACS (UK) Limited, Worthing   **February 1990 – May 1991**
Commercial Manager
- Business Planning and development. Contract negotiation. Facility management including bespoke MIS/IT Systems and Practices.

Aviation Resources Limited, West Sussex   **March 1989 – February 1990**
Technical Director
- Lear Jet procedures trainer (Aylesbury). Technical staff recruitment and deployment (Broken Arrow)

British Aerospace Simulation Ltd, Weybridge   **Sept 1988 – March 1989**
Chief Project Manager – Civil Aircraft Projects
- Jetstream J31 and BAe 146 Phase II Full Flight Simulators (Washington)
- Advanced Turboprop (ATP) Phase II FFS (Woodford)
- BAe146 Cockpit Procedures Trainer (Hatfield)
- Business Development within BAe and European Civil Markets
- Technical Consultancy for Reflectone, Inc., during acquisition by BAe (Tampa)

IMACS (UK) Limited, Worthing   **February 1986 – September 1988**
Rediffusion Simulation Ltd, Crawley   **August 1981 – February 1986**

Project Manager
- Visual Display Systems in Concorde, B737, B747, A320, BAe Jetstream Full Flight Simulators for BA, Lufthansa, KLM, SIA and British Aerospace
- Boeing B757/767 Maintenance Trainer update (Seattle)
- TWA B767 Flight Test Update (Kansas City)
- JAL B767 FFS installation and JCAB approval (FAA Phase II) in Tokyo

Systems Design Engineer
- EICAS systems expert for the Boeing B757/767 Maintenance Trainer update
- Designed and modelled the Autobrakes & Secondary Flight Controls Systems for a DC10-30 Cockpit Procedures Trainer.
- Designed and implemented real-time models of aircraft systems in B737, DC-10, L-1011 and B1-B Full Flight Simulators.
- Languages: FORTRAN77, Assembler, JCL & GENESIS.
- Operating Systems: GOULD-SEL32 RTM & MPX.

Freelance Sales, London
Life Assurance, Telecom and Medical   **October 1980 – August 1981**
Army (Royal Electrical and Mechanical Engineers) **April 1976 – October 1980**
Avionics Technician, Class II
Westland Scout, Gazelle, Lynx and DeHavilland Beaver
Wilbury Hotel, Letchworth
Bar / cellarman   **October 1975 – April 1976**
C. Hartley and Sons (China & Glass) Ltd, Letchworth
Driver/storeman   **May 1975 – October 1975**
Jones Cranes Limited, Letchworth
Sales Liaison Officer   **May 1974 – May 1975**