

Russell Couper

Experience

- 2013 - 2016** **Bristol Braille - Self Employed**
(Bristol Braille)
- Supporting Bristol Braille developing their multi line refreshable braille display.
 - Developing innovative solutions to the mechanical
 - Electrical control design
 - Engineering solutions for driving mechanism that moves the braille pins.
 - Presenting and working with visually impaired braillists
- 2008 - 2013** **Electric Vehicle Development - Self Employed**
(Dragon Electric Vehicles)
- Activities relating to electric vehicle construction, prototyping, one off conversions and maintenance on a variety of vehicles.
 - Designing one-off in-car instrumentation displays and battery management and battery protection circuitry.
 - Design of one-off microcomputer units to allow a modern cars control systems to function with the combustion engine absent.
 - Repair of professionally converted and production electric vehicles
 - Repair of existing amateur build electric vehicles.
 - Prototyping Green Power styled low power electric vehicles intended to be an educational tool for schools
- 2008 -** **Electronic repairs - Self Employed**
(Duxford Imperial War Museum)
- Repair and modification to the electronic control of educational interactive interpretation displays. These displays primarily explain or demonstrate various concepts of aviation to the general public. From the scientific concepts of flight to the mechanics of aeroplanes.
 - Redesign of analogue and digital circuitry for unreliable interactive displays.
- 2004 -2008** **Echo Stow Hill Community Group - Voluntary**
Treasurer.
- Project manager for Communities @One computer project. Large contribution to initial funding application and consequent reporting of project progress including final project report and audit trail to satisfy WAG project targets were met and funding was correctly spent. Project provided a computer suite that would sit eight beneficiaries and part time ICT worker who would run the courses put on by the project. Funding provided all computer hardware, software, printers and consumables as well as staffing and management costs.
 - Treasurer for the group and a member since its inception. Keeping the accounts in order and that budgets are spent correctly. Presenting figures at annual meetings.
 - Responsible for processing the paperwork for gaining charitable status ship for the group including arranging and running the special meetings necessary for this process. Attending charity law conferences and making the group aware of all the associated responsibilities.
 - Choice committee member for public presentation evenings.
 - Attending and reporting back from relevant meetings and training / awareness courses.
 - Steering group member for the Share project.

- Maintaining the groups website.
- Assisting the starting up and running of various subgroups.

2003 - 2004 IJTC Corus, Ijmuiden

Research Technologist

- Coordinator of ECSC (European Coal and Steel Community) project involving 4 European partners. Research into enhancing the galvanising process concentrating on the area of the snout / pot interface. Ensuring work plans and research aims were followed in a multi partner effort.
- Compiling and presenting technical reports to the Coal and Steel Community at international conferences on both technical and progress themes.
- Transfer of knowledge and good practices to Ijmuiden Galvanising lines in the Netherlands.
- Project leader for new technologies in galvanising.
- Project leader in various galvanising programmes.

1999 - 2003 WTC Corus / British Steel (Corus) UK

Research Officer / Project leader

- Coordinator of ECSC (European Coal and Steel Community) project involving 4 European partners. Research into enhancing the galvanising process concentrating on the area of the snout / pot interface. Ensuring work plans and research aims were followed in a multi partner effort.
- Compiling and presenting technical reports to the Coal and Steel Community at international conferences on both technical and progress themes.
- Project leader in various galvanising related programs.
- Generation and analysis of data for the zinc bath for improvement of the predictive mathematical model.
- 6 month secondment to Ebbw Vale to recommission and run TFX (Transverse Flux Annealing) pilot line for the research of electrical steel annealing cycles.
- Supervision of a technician and students

1995-1999 Orb Works British Steel (Corus), UK

Research Officer

- Development of new and existing on line test equipment for testing magnetic parameters of electrical steels.
- Development of new stand-alone computer automated test equipment for testing magnetic parameters of amorphous material.
- Ensuring new equipment is calibrated and traceable to the National Physics Laboratory.

1993 - 1994 Orb Works British Steel (Corus), UK

Sandwich Student

- Development of small in house test equipment.
- Maintain the departments computer equipment and provide support to computer users.

Education

2005 - 2008 Welsh Assembly and Communities 1st Initiatives

- Community Association Roles and Responsibilities with Capacity Building, 5 days.
- Local Partnership Board capacity building course, including – Partnership Working, Visioning, Mapping, Roles and Responsibility and Values, 5 days.
- Running a small charity.
- Roles and responsibility for trustees.
- Making funding applications.
- Workshop on sustainable funding.
- Committee Skills,

2002 Neighbourhood Initiatives Foundation

- Planning For Real ® Community Consultation Training, 3 days.

2002

University of Wales, Swansea

- Post Graduate Certificate in Materials Engineering.

1996 - 1997

Ashorne Hill, British Steel Management College

- Management and Skills, One week residential course.
- General management, One week residential course.
- Instrument and Control Engineering, One week residential course.
- Hot Rolling, One week residential course.

1992 - 1995

Glamorgan University, Pontyprydd, Wales, UK

- 2.1 BEng. Electrical and Electronic Engineering.

1994 - 1996

Newport College, Newport, Wales, UK

- C&G Post Advanced Iron and Steel Production Technology.
- C&G Advanced Iron and Steel Production Technology.
- C&G Iron and Steel Production Technology.

1990

Helston Sixth Form, Cornwall, UK

- Advanced level Maths.
- Advanced level Physics.
- Advanced level Chemistry.

1988

Helston Upper School, Cornwall, UK

- A. GCSC Maths.
- A. GCSC Physics.
- A. GCSC Craft Design and Technology, Metal work.
- A GCSC Technical Drawing.
- B. GCSC Computer science.
- B. GCSC Chemistry.
- C. GCSC English.
- C. GCSC Agricultural Science.

Computer Literacy

I am computer literate and consider myself competent in Microsoft Windows and most Microsoft Office applications. I am equally competent in Linux and Open Office applications. I have made many presentations using Power Point and OpenOffice Impress for presenting technical reports and presentations.

I use many different packages for design and production KiCad, Eagle, Arduino, Eclipse to name just a few. I am also quick to adapt to new software packages as needed.

Hobbies and Interests

My hobbies include building electronic projects, all weather motorcyclist, home DIY and making diesel powered motorcycles. I am also a father figure to my partners 6yo girl who I will involve and tailor projects to include her whenever I can.

My electronic projects are usually small but always to serve a purpose. Such as LED volt meters and LED speedos for myself and friends. I use many of the tools available to me at Bristol Hackspace to give a professional finish to most projects, such as laser cut cases, or milled gears. My projects are mostly to satisfy a particular need and are always my own design. One of the more interesting projects are some controlled heated clothing to make winter motorcycle commuting more comfortable. I usually make gifts for relatives rather than buy

presents and have made earrings, badges, reading lamps, keyrings.

I am a keen all weather motorcyclist and enjoy touring as a pastime. I have toured around the French and Swiss Alps and into Germany, Holland, Italy and France. More recently I stay closer to home and have explored the Highlands of Scotland. I perform all my own maintenance, engine tuning and repair work. I have also modified and built custom motorcycles in the past and have won several awards. My current ongoing project is making a diesel powered motorcycle with the end plan of attaching a sidecar. I fitted the sidecar to a previous bike that included the construction of a complete sidecar chassis, suspension, mounting bracketery and setting up the suspension geometry.

When not my motorbike I am usually cycling, walking my dog or helping out with my girlfriends horse.