Dan Purcell

Junior Test Technician
Automotive Electronics Manufacture

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In a nutshell

Military Background

Automotive Experience

Proud Geek!

Weapons Technician / Flight Servicing Mechanic. Disciplined, reliable, flexible. Electronics assembly, test system maintenance, fault diagnosis, repair and development.

Self-taught programmer and electronics tinkerer. Always building something and always learning.

Professional Experience

KSR Electronic Systems

Penllergaer Business Park, Swansea

2012 - Present

- Promoted to the position of Junior Test Technician in May 2015. Responsibilities include:
 - Supporting the Test department in developing new and existing test systems.
 - Debugging and contributing code for bespoke C# test software.
 - Supporting the Quality department in validation and failure analysis activities.
 - Breakdown response, fault diagnosis, rectification and maintenance of Test department equipment, including:
 - Parametric and stress test systems
 - Aeroflex
 - · Hipot Testers
 - · Laser etching and de-flash systems
 - PLC controlled test handlers
 - Bespoke test systems
- Joined as an operator in 2012 and quickly rose to the position of Technical Operator where my responsibilities included:
 - Process set-up
 - Product / tooling changeover
 - Breakdown response
 - Maintenance
 - Stock control
 - Rework

Royal Air Force

2001 - 2006

- Aircraft Weapons Technician. Working as part of a team, maintaining the weapons systems on the fleet
 of Nimrod MR2 aircraft. Responsible for fault diagnosis and rectification of all weapons systems, safe
 handling and loading of explosive stores and also Search and Rescue equipment. Often deployed
 overseas as the sole WT on crew.
- Composite Servicing Mechanic. Responsibilities included physical checks of the skin, undercarriage, flying control surfaces, brakes, lights, engines and tyres. Also refuelling and replenishing liquid oxygen, nitrogen, hydraulic oil, coolants, water and engine oil. Constantly working under pressure to maintain the flying programme.
- Twice attached to the station armoury at RAF Aldergrove, Belfast. Responsible for issues and receipts of weapons and ammunition as well as servicing of small arms.

Hobbies

- Programming
- Electronics
- Arduino
- · Raspberry Pi
- · Guitar, bass and keyboards
- Laser cutting/etching

Interests

- New technology
- Artificial Intelligence
- · Crypto currencies
- Linux

Coding skills

Java

Wrote an artificial life simulator using my own Neural Network and a Genetic Algorithm code.

C#

Ported my Java Neural Network library and with it, created an Automated Optical Inspection system using only a Raspberry Pi and a camera.

Contributions and bug fixes to be poke electronic test software with some SQL integration and GUI development.

Python

Various web scraping scripts, including one that writes live currency exchange data to a dedicated OLED display.

Serial communications and data logging.

Arduino (C/C++)

Built and programmed a custom MIDI controller mounted to a guitar for direct control of external effects processing.

Created a temperature and humidity sensor with serial logging.