**Personal Details**

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**Objective**

My aim is to secure a role as a systems design engineer or a systems architect. The position I would like to hold would involve working as part of a team responsible for design, test and analysis of electronic systems both software and hardware from planning through to market.

The ideal position would allow me to further develop my broad technical skills through a wide variety of disciplines. I'm equally comfortable working within an office based setting or at customer sites providing support as required. My work would involve good mix of specialist support and projects requiring strong problem-solving skills.  
  
I am passionate about products which have been brilliantly designed and beautifully engineered. I welcome the opportunity to work with other creative and technically-minded individuals in a culture where challenges and innovation are encouraged. The ideal company would be young in spirit, forward-thinking, with a focus on quality and excellence.

**Technical Skills**

* Excellent problem-solving ability with pragmatic focus and keen eye for detail
* Strong skills for development of test-oriented systems
* High level of aptitude with embedded microcontroller systems and PC hardware
* Good experience of PCB design and manufacture including Altium and OrCAD software
* Prototype PCB manufacture using commercial PCB milling machines
* Programming Experience in C and Assembler for Embedded Systems, C#
* LabVIEW at intermediate level (CLAD)
* Knowledge of 8051, Ti MSP430, PIC, and AVR microcontrollers
* Working knowledge of CPLD and FPGA design and implementation
* Compliance testing of RS232/422/485 Serial protocols, USB 1.1, USB 2.0 and PCIe 1.1
* Software versioning, review, and fault reporting systems including SVN, Bugzilla, Jira, and Crucible
* Working in an Agile environment; actively contributing to planning, retrospective, and daily scrums within the team.

**Career History**

**10/2017 – 02/2019 Apollo Fire Detectors LTD**

*Electronic Design Engineer*

Fire Detector embedded firmware

* Implementation of firmware for fire detectors in C
* Specification and review of requirements for fire detection technologies
* LabView development for fire detector interfaces and test equipment
* Training and support inter-departmentally for LabView-based systems
* Design of fire detection schematics and layout of PCBAs for new product development
* Investigation and proposing rectification of sustaining issues to support customers, feeding forward into future product design
* Reviewing project documentation, schematic and PCB layout files, and code
* Performing static analysis and refactoring of C code for MISRA 2012 compliance

**Career History (cont.)**

**01/2014 – 07/2016 Philips Healthcare – Sleep and Respiratory Care**

*Embedded Systems Engineer*

Medical Device Embedded System R&D.

* Providing technical guidance and support for microprocessor-based embedded hardware and software.
* Interfacing with external software developers and test facilities to ensure regulatory compliance to relevant medical device standards in the UK and US including ISO 62304, 60601, FDA 510(k).
* LabView development and maintenance of automated test systems for simulated lifetime use.
* Development from prototype to assembly of a medical device accessory to facilitate collection of patient adherence data, including design of both hardware and software to Class A standards.
* Implementing basic C# interface applications to facilitate test and debugging of HF RFID tag system.
* Installation and administration of an SVN server for the departments' PCB design and software development systems.
* Designing and reviewing PCBAs and performing inspection and test of finished goods.
* Retrofitting an OTS milling machine and re-purposing for PCB mechanical etching for rapid prototype of 2-layer PCBs.
* PCB assembly, SMT soldering and rework of ICs and components down to 0402.

**09/2013 – 01/2014 Sperry Rail International**

*Engineer Level 2*

Key Achievements

* Rework of complex LabVIEW code on an existing project which saw a significant reduction in processor overhead and user interaction delays
* Network debugging of NI FPGA devices to prove architecture
* Design, check and review of PCBs to redesign obsolete equipment
* Proposal of new safety-oriented procedures and team-building activities

Responsibilities

* Code debug and enhancement in LabVIEW
* PCB Design and review

**System and 10/2010 – 09/2013 Atmel Technologies UK LTD**

*Engineering Technician*

Key Achievements

* Writing of new robotic test software in LabView 2012 and C# VS2010
* Acting as Global Robot Lead for test system specification and development

Responsibilities

* Providing training and support for Application Engineers to perform characterisation of touch sensors
* Researching, developing and integration of new technologies to augment the current test suite
* Maintaining the site hardware asset list, and arranging repairs to equipment
* Organising test equipment calibration and servicing cycles and updating company records
* Documenting test and analysis procedures to company standards
* Staying ahead of current test methodologies to meet and exceed rapidly changing customer requirements
* Hosting training sessions for new Customers and Partners, as well as new Application Engineers
* Providing specialist support to global Test Team and other in-house departments
* Component level debugging in hardware and software
* Researching, implementing and documenting improvements to the touch screen characterisation process to enhance repeatability, reliability and usability of the test system, and coordinating with colleagues in the US for peer review
* Travelling globally to train and align Applications Engineers with the company’s test methodologies

**Career History (cont.)**

**03/2009 – 09/2010 MMI Research LTD t/a Cobham Surveillance**

*Systems Test Engineer*

*No specific details relating to the actual systems tested will be disclosed, implied or inferred due to their nature.*

*Any details given here are freely available in the public domain covered by patent.*

Key Achievements

* Researching, proposing and implementation of a new storage technology which reduced both production time and unit cost, whilst providing many technological benefits.
* Creation and maintenance of new test specifications for architecturally different software releases.

Responsibilities

* Verification, validation and integration testing of software candidates
* Fault finding and diagnosis of hardware and software systems and components
* Generating technically detailed fault reports and driving them through to resolution
* Working inter-departmentally to arrange repairs and modifications to test equipment
* Providing second-line support to after-sales support engineers
* Contributing to product and software development

**Education**

**2003-2007 Portsmouth University BEng (Hons) Computer Technology (2:1)**

Final Year Project: Access Control / Time Attendance System: mark 69%

**1995-1997 Cricklade College A-Level Mathematics, Physics**

**1990-1995 Harrow Way Community School 7 GCSEs at C or above**

**Other Qualifications**

National Instruments Certified LabVIEW Associate Developer (CLAD) – 07/2013 to 07/2015

**Interests**

I am actively into IT and digital electronics. I enjoy prototyping, experimenting with electronics and researching new technologies especially in the field of embedded systems. I enjoy teaching what I have learned to others and I regularly meet with friends to share and develop ideas for new home projects.

I am currently installing a solar and wind turbine energy system and developing a novel idea for green energy production. Past projects have included 3D printers, an LED lighting project using an AVR microprocessor, various robotics projects, and a custom-built UAV.

**References**

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| Available on request |  |