# Tanya Newell

Reading, Berkshire 0787 0300802 • 0118 957 2692 • tanya.newell@pobox.com

#### Personal statement

I am seeking a position that encompasses both my experience in embedded firmware development, and overall involvement in the whole design and development process.

I enjoy working in a team, but am self motivated and able to work independently. I have good spoken and written communication skills, both with technical and non-technical colleagues and with customers.

Recent achievements include developing and implementing a new version of the production test system to support a Linux based networked ticket validator, and the introduction of a process for in-house testing for safety compliance

# **Key Skills**

- Over 25 years experience of electronics and firmware development for devices including: barcode readers, magnetic stripe readers and point of sale keyboards, implementing various interfaces including RS232, and USB
- Firmware development in C, using numerous development systems, including Keil for 8051 family, ATMEL studio for ATMEL AVR family and Multi IDE / Greenhills ICE for Microchip / ATMEL ARM processors.
- Lead role in compliance activities including CE, sDoC (USA) & FCC certification
- Experience of full design lifecycle from capturing requirements to supporting introduction to manufacture

# **Employment History**

#### Senior Development Engineer - Access-IS (formally Access Keyboards Ltd)

(Jan 2000 – Present)

Achievements and responsibilities:

- Product design including:
  - Capture of sales/customer requirements to engineering specifications
  - o Input to electronics design, including some schematic design in Altium
  - o Firmware development in C
  - Working with mechanical engineers to understand physical and optical constraints
  - Test and debug of products including firmware and hardware
  - Compliance testing and documentation.
  - o Review of data to be sent for in house and subcontractor manufacturer
  - Implementation of production test, including additions to test utilities in C++
- Working with quality manager to maintain and update hardware and software engineering procedures in an ISO 9001 environment

### Senior Engineer - Access-IS (formally Access Keyboards Ltd)

(1994 - 1999)

Achievements and responsibilities:

- Electronics design, mainly microcontroller based, for keyboards for point of sale and industrial applications
- Schematic entry / PCB layout using Orcad and Protel
- Firmware development, mainly in 8051 assembly code

# **Development Engineer - Possum Controls Ltd**

(1991 - 1993)

Achievements and responsibilities:

 Firmware development and hardware/firmware debug for Palantype shorthand machines used as part of a live subtitling system.

### **Development Engineer - Philips Consumer Electronics**

(1990 - 1991)

Achievements and responsibilities:

• PC based software for home automation system written in C, interfacing with TV Teletext chip in TVs over I<sup>2</sup>C.

#### **Education**

# **University of Kent at Canterbury**

(September 1987 – June 1990)

BSc Electronic Engineering with Medical Electronics - Class 1

## **Rainham Mark Grammar School**

(September 1979 – June 1986)

A-levels:

- Mathematics A
- Physics A
- Computer Science C

10 O-levels grade A-C, including Maths and English

## **Hobbies & Interests**

I enjoy cycling - especially when there's a pub or tea shop on the route, and try to get out for a ride most weekends.

I'm actively involved in my local church, including helping in the creche and with community events such as the neighbourhood street party. I also enjoy occasional quiz nights.

#### References

References are available upon request.