#### Scion Instruments (UK) Limited

4 Michaelson Square Livingston, West Lothian, EH54 7DP United Kingdom **Telephone** +44 (0)1506 300 200 **Facsimile** +44 (0)1506 425 320 Website www.scioninstruments.com



### JOB DESCRIPTION

Job Title:	Embedded Software Engineer
Department:	SCION R&D Centre
Location:	Livingston, Scotland
Reporting:	Head of Software and Firmware

### **SUMMARY**

### THE COMPANY

SCION Instruments is part of Techcomp Europe Ltd, and has headquarters in Livingston, Scotland and Goes, Netherlands.

Techcomp comprises of a group of European companies engaged in the design, development, manufacture and distribution of analytical systems, life science equipment and laboratory instruments with operations dating back to 1920. SCION Instruments focuses on the manufacture and GC, GC-MS, GC gas analysers, autosamplers, headspace and LC products servicing a range of markets.

Techcomp has the infrastructure to support global sales and service.

SCION instruments is currently building up its R&D capability for designing and developing the next generation of breakthrough products for an expanding range of applications relating to human life and the environment. Our current target markets focus to chemicals, forensics, food quality, environmental, oil and gas, pharma.

### THE ROLE

We are seeking a creative Embedded Software Engineer, who has a passion to create, design and implement embedded software, along with the desire to learn, all within a growing multidisciplinary scientific and engineering product development group.

Technologies involved include analytical instruments using Gas Chromatography and Mass Spectroscopy techniques.

### RESPOSIBILITIES

- Participate in requirements capture for assigned projects.
- Participate in architecture design for assigned projects.



- Designing, implementing, and testing of embedded software for the given requirements of assigned projects.
- Maintenance of the existing embedded software of assigned projects for problem solving and provision of post-production support.
- Participate in reviewing of the code and designs of embedded software for assigned projects.
- Participate in the testing and release of embedded software for assigned projects.
- Writing supporting documentation detailing code architecture, function, and purpose.
- Collaboration with Electronic\Mechanical Engineers and Product Scientists.
- Mentoring of less experienced Software \Firmware Engineers.
- Reporting directly to the assigned lead(s) within assigned projects and indirectly to the Head of Software and Firmware.

# REQUIREMENTS

- Degree or higher in computer science or equivalent formal education (candidate without formal qualifications, or with relevant science/engineering degrees who can demonstrate relevant experience will also be considered).
- Proven experience of commercial or industrial embedded software product development to high quality standards, from gathering requirements and writing specifications to testing and debugging.
- In depth experience of writing low-level, bare metal and RTOS (FreeRTOS preferable) based embedded software in C.
- Experienced in the use of ARM based processors (STMicroelectronics\NXP Cortex-M series preferred).
- Using communications interfaces including I<sup>2</sup>C, SPI, CAN, USB and Ethernet.
- Controlling and monitoring hardware devices including digital I/Os, ADCs, DACs and stepper motors.
- Ability to read electronics schematics and understand component datasheets, with an appreciation of hardware electronics design.
- Experience of using Source Code Management (including SVN), Bug tracking tools (JIRA preferable) and Integrated Development Environments (IAR Workbench preferable).
- Excellent problem-solving skills and attention to detail.
- Ability to work independently as well as in a collaborative team environment.
- Good communication and interpersonal skills.

# SUMMARY OF EMPLOYMENT CONDITIONS

Hours of work 37.5 hours per week.

After an initial qualifying period, and subject to the company's terms and conditions of employment, the company offers paid sickness, death in service, private medical insurance, flexible working week, pension scheme, paid holidays and relevant statutory days as taken by the company and a performance related bonus scheme.