

## **Software Engineer – Meggitt Sensing Systems**

Our roots go back to 1852 when we developed the world's first altimeter. Today, commercial and military pilots all over the world use our intelligent air data systems and compact flight deck instruments to assimilate critical information. Our innovative products have made a significant contribution to the evolution of the modern cockpit.

**Interview date 16.01.2016 (Please keep this date spare).**

### **Role**

If you've got the drive and ability to make your mark on the avionics of the future, look no further. We are looking for an ambitious graduate to work within our integrated project teams as a hardware engineer.

Mentored by expert senior engineers, you'll play a central role in increasingly complex projects, honing your skills in one of the most demanding hardware environments. From capturing initial requirements and presenting clear, unambiguous design concepts, through to simulation testing and validation, our software will come to life in your hands.

We'll work with you to create a two-year plan, giving you exposure to the different phases of the development lifecycle. As you progress with on- and off-the-job training from some of the sector's leading experts, you will master:

- Producing elements of written Software Development Plans (SDP) to identify work activities to be carried out during an engineering development. Typically this work will be in accordance with DO178C guidance
- Interpreting system requirements into clear unambiguous software design requirements from which you or other engineers can work
- Producing embedded software design implementations for avionics grade products. The design will progress through software architecture, modular software design to implemented code and may involve the use of high level tools such as SCADE
- Documenting design activities and using standard tools to ensure traceability of design to requirements
- Carrying out technical analysis of engineering options using simulation, test or design data to draw clear conclusions and make recommendations to other engineers and management
- Presenting software level design information to project review boards, which may include customer representatives
- Peer reviewing technical information, documents or decisions made by colleagues in software and other engineering disciplines
- Working collaboratively with systems and hardware engineers to ensure that software level requirements have been demonstrably met and to overcome trade-offs or problems identified in the overall design.
- Constructing and/or executing test plans to verify software against requirements

- Ownership and delivery of small standalone engineering design or test tasks, commissioned by Meggitt Subject Matter Experts (SME); to maintain or advance MAV engineering knowledge in our core technology areas

If you've got the drive and ability to solve complex engineering problems and deliver high quality software, you'll rise rapidly through the business.

To boost your professional development, we encourage you to qualify as a chartered engineer and will support you throughout the process.

### **Essential criteria**

- Good degree (2.1 or above) in an engineering or closely related subject
- You work well in multi-discipline teams
- You can identify solutions and trade-offs to engineering problems and make clear, actionable recommendations
- You communicate well, verbally and in writing—you can clearly explain complex engineering concepts
- You know how to plan and prioritise your workload
- Because our products are safety critical and our industry highly regulated, you need the highest levels of professional and personal rigour
- You deliver over and above expectations as standard

### **Desirable criteria**

- Impressive engineering achievements, either in work placements and/or university project work
- Specific degree (ideally a Masters), or modules related to requirement management and formal software design
- Exposure to use case design in UML or similar
- Exposure to software driver aspects of data bus standards such as RS242/232, CANBUS, I<sup>2</sup>C, SPI, ARINC429, Ethernet.
- Experience of using software to model or simulate engineering problems to provide evidence for decision making and/or develop algorithms
- Knowledge of digital hardware and the software/hardware interface for embedded software
- Experience of using standard laboratory test equipment for debugging software on target hardware

- Understanding and ideally experience of some or all parts of a formal engineering development lifecycle
- Understanding of management from an engineering perspective through degree modules, project or work experience.

**Interview date 16.01.2016 (Please keep this date spare).**

### **About Meggitt Sensing Systems**

Meggitt Avionics is part of Meggitt Sensing Systems (MSS), the world's leading provider of high-performance sensing, monitoring, power and motion systems. From aircraft and space launchers to nuclear power stations and heart monitors, our sensors and systems are developed for some of the most demanding environments known to man. MSS is one of five divisions of Meggitt PLC.

### **About Meggitt**

Meggitt PLC is the global engineering group specialising in extreme environment components and smart sub-systems for aerospace, defence and energy markets. Some 11,000 employees work across the Americas, Asia, Europe and the Middle East.