

Job Title	TECH - Graduate Embedded Software Engineer
Detailed Job Description	
<p>Background</p> <p>STFC Technology provides advanced technology and engineering in support of many high profile international projects and scientific research facilities. Part of our expertise is in the design, manufacture and operation of advanced detectors and instrumentation. A key element is the development of high performance control and data acquisition systems, interfacing to our advanced imaging sensors, detectors and complex digital electronics systems, in which real-time and embedded software plays an essential role. Our systems can be found throughout the world and even in space.</p> <p>Our leading facilities and varied projects will provide you with unique and challenging career opportunities. If you are an enthusiastic software engineer then we would be interested in you joining our team.</p> <p>Our Graduate Engineers are offered permanent contracts and will work on real projects from day one. You will be given a wide variety of training in both technical and personal skills and supported to develop and achieve your full potential in a dynamic, creative and collaborative culture. You will be part of both the STFC Graduate Scheme and actively encouraged in achieving chartered status through the appropriate professional institution.</p> <p>Personal Skills and Attributes</p> <p>You should be interested in a technical career as a software engineer, have good awareness of basic software principles, tools, methodologies and programming languages and how these apply to modern software design. Given the nature of the projects undertaken, knowledge of real-time systems, embedded design and integration of hardware and software systems is also desirable. A good honours degree in a relevant subject, which meets the requirements of an appropriate professional institution for progression to chartered status, is essential.</p> <p>You must be self-motivated and dedicated to understanding the continuously evolving software techniques, tools and methods. You will be supported by experienced colleagues, and a mentor, but will be expected to be able to act on your own initiative and be able to demonstrate a systematic and analytical approach to problem solving.</p> <p>You will be reliable and flexible with good interpersonal skills and the ability to integrate and work effectively within the existing close knit team. Good written and verbal communication skills (in English) and the ability to communicate effectively with colleagues, project partners and customers is essential.</p> <p>This post is based at STFC Rutherford Appleton Laboratory, Oxfordshire, UK.</p>	
POSITION AND PERSON REQUIREMENTS	
SHORTLISTING CRITERIA	
<p>Essential:</p> <ul style="list-style-type: none"> ▪ MEng (first class or 2:1) in a relevant discipline (e.g. Software Engineering or other subjects with significant software content). Equivalent qualifications also acceptable. Degree(s) must meet educational requirements for chartered status with an appropriate professional institution. 	

- Expecting to graduate in 2017, or if already a graduate then degree must have been obtained within 18 months of this application.
- Minimum of three A-levels at grade C or above one of which must be mathematics, or alternative qualifications, (eg BTEC / international examinations) of an equivalent level.
- Degree content (and projects) that are relevant to the post advertised.
- Clear, comprehensive, credible and coherent application.
- Good written communication skills (in English).
- Right to live and work in the UK

Desirable:

- Membership of an appropriate professional institution.
- Relevant industrial experience or a directly relevant university project.

INTERVIEW CRITERIA

Knowledge and Experience

Essential:

- Demonstrate knowledge and understanding of basic software design principles and programming languages
- Demonstrate ability to apply basic knowledge to more complex situations.
- Good general awareness of modern design processes and methodologies.
- Self-motivated with a systematic and analytical approach.

Desirable:

- Knowledge of relevant languages (e.g. C, C++, Python)
- Basic understanding real-time and embedded system software design
- Basic understanding of hardware/software interfacing and integration

Personal skills/qualities

Essential:

- Aptitude for problem solving and diagnosis of challenging problems.
- Good interpersonal skills with the ability to communicate and influence people effectively at all levels with internal and external colleagues and customers. Good verbal communication skills (in English).
- Conscientious, reliable, hardworking and flexible.
- Dedication to maintaining relevant technical knowledge and committed to Continuing Professional Development.
- Demonstrate good team working capabilities

Special Requirements

Essential:

- Genuine interest in software design
- Ability to use unmodified computing equipment and development tools for extended periods of time.

- Ability to integrate and work effectively within the existing team based environment at STFC - RAL.
- The willingness to learn new skills, both technical and non-technical
- Demonstrates a drive and determination to achieve results
- Open minded and flexible in relation to the type of work assigned to them

Desirable:

- Ability to travel within UK, Europe and US as required.