**Geomagnetic IT Specialist**
**UKRI – NERC – BGS**
**The Lyell Centre, Edinburgh**

**£24,777 to £33,459 per annum (depending on qualifications and experience.  A salary above £30,782 per annum you will need to meet the desirable criteria detailed on www.topcareer.jobs)**

**Full-Time – 37 hours a week (a range of flexible working options may be available)**
**Fixed Term Appointment (3 years)**

**About us**

The British Geological Survey (BGS) is an applied geoscience research centre that is part of UK Research and Innovation (UKRI) and affiliated to the Natural Environment Research Council (NERC).  It is a world leading geological survey that provides a core science mission to inform government of science related to the subsurface and its interfaces and also undertakes applied research for solutions to earth and environmental processes, both in the UK and globally.  It is funded directly by UKRI as well as through research grants and via private sector contracts.

BGS has an annual budget of approximately £60 million and employs 650 people.  It has two main sites, a head office in Keyworth near Nottingham and the Lyell Centre, which is a joint collaboration with Heriot Watt University in Edinburgh.  BGS works with more than 150 private sector organisations as well as having close links with 40 universities and sponsors approximately 100 PhD students each year.

**About the role**

We have an opportunity for a talented and motivated IT Specialist to join the BGS Geomagnetism Team based in our offices in Edinburgh which are located on the Heriot Watt University campus.

The Geomagnetism Team undertakes long-term monitoring of the Earth's magnetic field through the operation of magnetic observatories in the UK and overseas.  We use worldwide land, marine, airborne and satellite data to make global models describing how the Earth's magnetic field changes in space and time and what that reveals about physical processes within the solid Earth.

We also research the magnetic field changes in satellite and observatory data that result from space weather and solar activity and how this impacts modern technology.  We apply our science in precision navigation, including directional drilling for oil and gas as well as researching the effect of space weather on ground-based technology and our environment.

The primary tasks of this role will be to:

- Support the development of a BGS space weather data service IT interface for a major customer.

- Design and implement restful web services that allow us to present our (mainly time-series) science data to customers and the public in real-time.
- Help to maintain and develop existing systems, in particular Java Desktop data visualisation applications and Java and Python web applications for real-time data delivery and display.
- Take the lead in a particular area of technology that is important to our future business (e.g. DevOps)
- Create user requirements from a diverse range of customers *[Essential experience for a higher salary]*.

You will also be expected to:

- Take a leading role in the development of one or more of our software products
- Provide IT support to scientists in the Geomagnetism Team.
- Undertake training in basic geomagnetism to understand the background to the IT work.
- To pursue a programme of continuing professional development in IT.
- Supervision of other IT staff and students as required *[Essential experience for a higher salary]*.

You will be involved in all stages of the software lifecycle, from design to deployment. Candidates should also note that there is latitude to develop this role around your own skills and you can expect to gain a significant amount of experience:

- Full responsibility for solving complex scientific and business problems under your own initiative.
- Exposure to a wide range of technologies.
- Opportunity to contribute to the scientific output of the organisation, and the possibility of representing BGS at international scientific conferences.

**About you**

Candidates should have a Degree/Diploma in an IT related discipline, or another discipline with significant IT content (or significant equivalent work experience). An MSc or professional qualification in an IT related discipline would be highly desirable.

Candidates should be able to demonstrate experience of programming in at least two languages, ideally Java and Python and have strong examples of technical problem solving.

The post would suit a self-motivated person with excellent communication skills and who is willing to be an active team player. The post holder must be able to attend the Edinburgh office during normal business hours.

Please also refer to the specific essential and desirable skills criteria for this post. <u>To be considered for a salary at the higher end of the advertised range, you will need to demonstrate a significant amount of the desirable criteria listed.</u>

**What we offer**

A generous benefits package is also offered, including a very competitive pension scheme, 30 days annual leave plus bank holidays, free parking and access to flexi-time.

We also offer the 'Bike to Work' scheme, free parking, health and wellbeing support, social clubs and on-site sports facilities.

Please note that any internal BGS staff applying for this post would, if successful, be appointed to new UKRI Terms and Conditions and pay.


**How to Apply**

Applicants are required to include a cover letter outlining their suitability for this role. We would stress the importance of this paperwork in our selection process. **A well thought through application addressing the advertised essential and desirable criteria for the post will be considered far more favourably than a generic covering letter and CV.**

Applications are being handled by UK Shared Business Services, to apply please visit our job board at https://topcareer.jobs/Vacancy/irc253197_10559.aspx

Applicants who are unable to apply online should contact us by telephone on +44 (0)1793 867000.

Closing date for receipt of applications is **12 April 2020**.

BGS provides a range of flexible working options including flexible working patterns, compressed hours and home working so if you have a need for flexibility, please raise this in the recruitment process when your needs, balanced with the requirements of the role, will be fully considered*.*

We are committed to promoting equality and diversity across our organisation as well as across all areas of our science community. As such, we aim to have a workforce with employees from all backgrounds with people who are passionate about earth science and who share our commitment to work for the good of the environment and the benefit of society.

We will actively seek to avoid discrimination on the grounds of age, disability, race (including colour, nationality, ethnic or national origin), sex or sexual orientation, being trans or a member of the non-binary community, being married or in a civil partnership, being pregnant or on maternity leave, disability, race (including colour, nationality, ethnic or national origin), religion, sex or sexual orientation.

The British Geological Survey is an Investors in People organisation and has achieved Bronze status for Athena SWAN – a scheme that recognises an organisation's commitment and progress in developing a diverse and inclusive workforce.



| Specific Skills Criteria | |
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|  | *Essential* | *Desirable:* |
|---|---|---|
| **QUALIFICATIONS** | *Degree/Diploma in an IT related discipline, or another discipline with significant IT content, or significant equivalent work experience [S]* | *MSc or professional qualification in an IT related discipline [S]* |
| **EXPERIENCE** | *Work experience in programming in at least two languages, ideally Java and Python [S,I]*<br><br>*Must show strong examples of technical problem solving ability [I]* | *Experience in other computer languages, including: C, Fortran, Shell scripts, Perl [S,I]*<br><br>*Experience in client side programming: Javascript, HTML5 and CSS [S,I]*<br><br>*Experience of using programming skills in a scientific context (scientific programming/software carpentry) [S,I]*<br><br>*Experience of formally or informally leading or managing others* ***[Essential experience for a higher salary]*** *[S,I]* |
| **KNOWLEDGE** | *Knowledge of the UNIX operating system as a user and/or administrator, ideally CentOS Linux [S,I]* | |
| **SKILLS AND ABILITIES** | *Good English communication skills, both reading, writing and spoken [S,I]* | *IT development technical skills. We will consider applicants with related skills in technologies that BGS doesn't use, but ideally you will have skills in some of: Git version control; GitLab and Docker continuous integration; Conda environments for Python; Maven build system [S,I]* |
| | *Essential* | *Desirable:* |

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|---|---|---|
| | | *Web service technology skills. We will consider people with related skills in technologies that we don't use, but ideally you will have skills in some of: Django (Python) web service development; Java Servlet container development; Restlet; Tomcat [S,I]*<br><br>*Ability to take a business/scientific problem of significant complexity and design a software solution* ***[Essential experience for a higher salary]*** *[I]* |
| **PERSONAL QUALITIES** | *Must demonstrate the ability to work well in a team [I]*<br><br>*Able to adapt to change and work in a flexible manner [I]*<br><br>*Able to manage your own time including the potential to effectively manage multiple simultaneous tasks and meet tight deadlines [I]* | |
| **MOTIVATION** | *Demonstrates an interest in developing your own area of expertise – good record of Continuing Professional Development in IT [I]* | *Demonstrates familiarity with the present online data delivery methods of the BGS Geomagnetism Team [I]* |