

Job Description and Person Specification

Last updated: 11 July 2019

JOB DESCRIPTION

Post title:	Research Software Engineer		
Academic Unit/Service:	Electronics and Computer Science		
Faculty:	Faculty of Physical Sciences and Engineering		
Career Pathway:	Education, Research and Enterprise (ERE)	Level:	4
*ERE category:	Enterprise pathway		
Posts responsible to:	SSI Deputy Director		
Posts responsible for:	n/a		
Post base:	Office-based		

Job purpose
To assist in the delivery of collaborative, multi-site, interdisciplinary software engineering consultancy to the portfolio of clients developed by the Southampton Research Software Group (SRSG) and the Software Sustainability Institute (SSI).

Key accountabilities/primary responsibilities	% Time
1. Delivery of activities of specialised software consultancy services to research partners, clients and industrial collaborators either as part of co-funded collaborative projects, SSI-funded consultancy or paying customers.	50 %
2. Support the engagement in key research/consultancy areas to promote the activities of the group, such as seminars, conference presentations and training events	10 %
3. Write materials for documentation, dissemination and tutorials and knowledge to meet the needs research partners, clients and industrial collaborators.	10 %
4. Keep abreast of software development techniques and practices used by the research community.	10 %
5. Engage with the UK research community – including the RSE community - to identify areas opportunities for collaboration or consultancy.	10 %
6. Any other duties that fall within the scope of the post as allocated by the line manager following consultation with the post holder.	10 %

Internal and external relationships

- SSI Deputy Director (internal) and SRSG Directors (internal)
- Pamela Ugwudike (Faculty of Social Sciences) (internal)
- Adrienne Chapman (Faculty of Engineering and Physical Sciences) (internal)
- SRSG clients (internal)
- SSI collaborators (external)
- RSE Community (external)

Special Requirements

- Travel to other universities and research organisations will be required – typically within the UK although some European travel may be possible.
- Flexible hours of work may be required if appropriate as well as core hours.
- Good communication skills are essential
- The maintenance of confidentiality in information and data management at all times is mandatory
- The post will require the job holder to possess excellent interpersonal and customer service skills.

Person Specification

Criteria	Essential	Desirable	How to be assessed
Qualifications, knowledge and experience	<ul style="list-style-type: none"> • PhD or equivalent professional qualifications and experience in scientific research. This level of knowledge and experience may have been achieved via a postgraduate degree or professional qualifications in a subject area supplemented by demonstrable experience in scientific research. • Development experience with any two of the following: Python, R, Javascript/Node.js, Ruby, Fortan • Demonstrable understanding of the Bash shell • Practical experience of version control systems • Ability to deploy software to, and configure, common linux distributions • Ability to conduct data searches to identify relevant data for research purposes. 	<ul style="list-style-type: none"> • History of contributions to interdisciplinary research projects or the delivery of consultancy services • Experience of web development • Web server configuration, e.g. Apache or NGINX • Experience with database technology, e.g. SQL/NoSQL • Knowledge of debates surrounding the predictive technologies used in the justice system, including those used by the police. 	Application/ Interview
Planning and organising	<ul style="list-style-type: none"> • Ability to progress collaborative multi-site activities to meet deadlines and quality standards • Proven organisational and time management skills 	<ul style="list-style-type: none"> • Demonstrable experience of managing projects 	Application/ Interview
Problem solving and initiative	<ul style="list-style-type: none"> • Able to independently solve a range of problems by responding to varying circumstances • Ability to apply specialist knowledge to analyse complex problems and recommend solutions 		Application/ Interview
Management and teamwork	<ul style="list-style-type: none"> • Able to contribute to team efficiency through sharing information and constructively supporting others. • Able to maintain good working relationships across a range of colleagues, clients and stakeholders. • Able to work effectively independently and identify issues that must be raised with the team 		Application/ Interview
Communicating and influencing	<ul style="list-style-type: none"> • Ability to write clear and concise technical material • Ability to prepare and deliver presentations to audiences with different levels of technical ability • Ability to identify and articulate requirements and issues arising from meetings • Ability to train others and conduct tutorial-style activities 	Experience of Software Carpentry instructing or helping	Application/ Interview
Other skills and behaviours	<ul style="list-style-type: none"> • Evidence of good interpersonal skills. • A flexible approach and manner • A willingness and demonstrable experience of learning new technologies and methods of working • A passion for research 		Application/ Interview
Special requirements	N/A		Application/ Interview

JOB HAZARD ANALYSIS

Is this an office-based post?

<input checked="" type="checkbox"/> Yes	If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below.
<input type="checkbox"/> No	If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below. Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder.

- HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

ENVIRONMENTAL EXPOSURES	Occasionally (<30% of time)	Frequently (30-60% of time)	Constantly (> 60% of time)
Outside work			
Extremes of temperature (eg: fridge/ furnace)			
## Potential for exposure to body fluids			
## Noise (greater than 80 dba - 8 hrs twa)			
## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below:			
Frequent hand washing			
Ionising radiation			
EQUIPMENT/TOOLS/MACHINES USED			
## Food handling			
## Driving university vehicles(eg: car/van/LGV/PCV)			
## Use of latex gloves (prohibited unless specific clinical necessity)			
## Vibrating tools (eg: strimmers, hammer drill, lawnmowers)			
PHYSICAL ABILITIES			
Load manual handling			
Repetitive crouching/kneeling/stooping			
Repetitive pulling/pushing			
Repetitive lifting			
Standing for prolonged periods			
Repetitive climbing (ie: steps, stools, ladders, stairs)			
Fine motor grips (eg: pipetting)			
Gross motor grips			
Repetitive reaching below shoulder height			
Repetitive reaching at shoulder height			
Repetitive reaching above shoulder height			
PSYCHOSOCIAL ISSUES			
Face to face contact with public			
Lone working			
## Shift work/night work/on call duties			