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| Last updated: | January 2025, JB |

**JOB DESCRIPTION**

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| Post title: | Software Engineer | | |
| School: | Electronics and Computer Science | | |
| Faculty: | Faculty of Engineering and Physical Science | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Enterprise pathway | | |
| Posts responsible to: | Professorial Fellow - Enterprise | | |
| Posts responsible for: | None | | |
| Post base: | Office-based | | |

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| Job purpose |
| To undertake software development work and customer support activities for a range of clients as part of a well-established and successful team.  This includes supporting a large number of EPrints repositories which promote Open Access, Open Data and Open Science. Additionally supporting several bespoke content management systems for both higher education and corporate clients.  To support and maintain the Open Source EPrints platform.  To assist in the support and development of other hosted services including:   * Django based applications. * WordPress/Drupal based sites and integrations. * Locally developed testing and monitoring systems.   To work with other systems and their integrations as required, depending on the varied nature of the projects as they arise.  Provide support for both technical and non-technical customers.  Assist the team in the administration of Linux servers running repositories and other services.  Assist in the coordination of software development and customer driven projects.  To proactively help grow the commercial Enterprise activities of the Team, aiding in the growth of its business by successfully delivering on customer focused projects. Broadening the technical remit of the Team and the services which it delivers. |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | Carry out Enterprise activities such as consulting, service provision, testing or other evaluation work, often under supervision of a project leader.    This will include undertaking applied software development using a Linux environment. To develop and create EPrints-based repositories and other content management systems.  This will involve much of the software lifecycle, including requirements elicitation from users, analysis, design and implementation of new features, testing and release.  To provide support to clients using EPrints software, or other supported systems. This could involve resolving a specific operational issue or problem determination of a defect in the deployment. | 70 % |
|  | Support and maintain other Linux-based service instances such as Django, WordPress, Drupal, plus other locally developed novel systems. | 10% |
|  | Maintaining both technical and procedural information in the issue tracking system. Assist in keeping team project and technical documentation up to date. | 10 % |
|  | To prepare and give technical presentations on the EPrints software to existing and potential users of the software via Teams or at conferences and workshops. | 5 % |
|  | Any other related duties as allocated by the line manager following consultation with the post holder. | 5 % |

| Internal and external relationships |
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| Internally, as a member of the team, the post holder will be responsible for defined tasks and will co-ordinate their activities with the other members of the team.  Externally, undertake technical liaison with academic and non-academic staff working for project partners on software development projects and in support of existing EPrints repositories and other maintained services. |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | PhD *or* an equivalent combination of professional qualifications and experience in Computer Science or a related discipline and/or industrial experience.  Ability to establish quality design and software to deliver quality outcomes to clients and be responsive to any issues they raise.  Some knowledge of Linux & Web technologies, XML, JavaScript and CSS. | PhD in Web Science, Software Engineering or User interface/User experience.  Postgraduate qualification (MSc or PhD) in a relevant area.  Website or user interface design experience.  Experience with Python, PHP, Perl, or similar applicable high level programming language. | Application/  interview |
| Planning and organising | Able to plan and schedule their own and the work of others to meet multiple concurrent projects and minimise the impact on other clients. | Experience and/or keenness to take on project management tasks. | Interview |
| Problem solving and initiative | Able to develop understanding of complex problems and apply in-depth knowledge to address them.  Able to gather technical requirements in order to design a solution to meet requirements.  Able to develop original techniques/methods. |  | Application/  interview |
| Management and teamwork | Able to co-ordinate day-to-day activities with other staff working on the same or related tasks both locally and at remote customer locations. | Able to collaborate professionally and effectively with colleagues at all levels inside and outside the organisation. | Application/  interview |
| Communicating and influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience.  Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes. |  | Application/  interview |
| Other skills and behaviours | Understanding of relevant Health & Safety issues.  Proactive in promoting a working environment that is inclusive and engaging; recognising the value diversity brings. |  | Application/  interview |
| Special requirements |  | Able to occasionally attend national and international meetings and conferences. | Application/  interview |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| 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. |
| 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.

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| **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 |  |  |  |