Job Description



Senior Research Software Engineer (Skilled) – Digital Institute

Faculty of Science, Agriculture & Engineering

Main Purpose

The position of Senior Research Software Engineer (RSE) for the Digital Institute (DI) plays a vital role in supporting the Institute's technical effort. The post holder is responsible for leading the delivery of technical projects and is expected to proactively collaborate with researchers, supporting the use of relevant technologies and contribute significant software engineering skills into the research project.

Main Duties and Responsibilities

Responsible for leading or supporting the delivery of DI projects, assisting

- collaborating researchers through the use of significant technical skills.

 2. To be the technical lead in research funding bids with the aim of selecting technically feasible projects with the potential to transform research.
- 3. To lead on the selection and use of software and data infrastructure, including technologies for version control, continuous integration, deployment and code review.
- 4. Collaborate with researchers to develop appropriate technical solutions to research problems.
- 5. Provide expert advice and assistance to clients and colleagues in problemsolving relating to DI activities.
- 6. Present work and provide updates, including the effective communication of complex or technical information, at project meetings and events.
- 7. Develop and deliver training and support for DI technical staff and researchers to ensure effective use of relevant technologies.
- 8. Represent the DI and disseminate information about the DI and its work at national and international events.
- 9. To lead on learning and development at the DI through the provision of documentation, training and advice in order to support the wider research community.
- 10. Undertake relevant training and development activities in order to develop an awareness of own professional development needs.
- 11. Maintain and develop extensive knowledge to keep abreast of the latest/most relevant technologies.
- 12. Any other duties within the scope and general nature of the grade which may be required.



Job Description



Person Specification

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| | Qualifications | Essential or Desirable |
|---|---|------------------------|
| 1 | An PhD in computer science, or equivalent software experience. | E |
| | Knowledge, Skills and Experience | |
| 1 | Extensive experience or taught specialism in one or more areas of Software Engineering. Including, but not limited to; Cloud Computing, Visualization, Web Applications, Data Analytics, Artificial Intelligence. | E |
| 2 | Software development experience in a commercial or research environment | E |
| 3 | Understanding of software development tools and methodologies, including programming languages, documentation, testing, version control, issue tracking, and continuous integration | Е |
| 4 | Track record of developing software that is used by others | E |
| 5 | Ability to manage own work, including planning and execution | Е |
| 6 | Understanding of a range of data manipulation methods and tools | D |
| 7 | Experience of working in wide variety of application domains | D |
| 8 | Excellent communication skills including the ability to present complex or technical information and the ability to work with others to understand technical and user requirements | D |
| 9 | Experience of deployment and management of complex software solutions onto cloud infrastructure | D |



Job Description



| 10 | Cross-organisation collaboration on software development projects | D | |
|---------------|---|---|--|
| | Attributes and Behaviours | | |
| Delivering | Works continually towards achieving success | | |
| Service | through understanding and meeting or exceeding the expectations of project collaborators, the | | |
| | University, students, colleagues and other | | |
| | stakeholders. Is enthusiastic in getting the job | | |
| | done on time and demonstrates high energy and commitment to the delivery of excellent service. | | |
| Finding | Generates a range of viable options and decides | | |
| Solutions | on an appropriate course of action that best fits | | |
| | organisational and area goals. Encourages | | |
| | creative and innovative thinking in self and others | | |
| | and makes decisions based on understanding the | | |
| | wider organisational needs and having | | |
| - 14/ 11 | considered a range of possible options. | | |
| Team Working | Operates in a number of different teams and | | |
| | groups across the organisation, confident in adopting a range of team roles. Looks at ways of | | |
| | developing cross functional co-operation and | | |
| | support and looks to build alliances and | | |
| | relationships outside of the group. | | |
| Understanding | Understands individual or group motives, | | |
| Others | understands the culture of a particular area, school | | |
| | or faculty. Is able to quickly and effectively learn | | |
| | the methods and language used within other | | |
| | groups. | | |
| Planning and | Works in a planned and structured way, uses own | | |
| Organising | and others' time effectively. Sets own priorities in | | |
| | conjunction with team and area objectives. Quickly | | |
| | identifies what is important and prioritises accordingly whilst monitoring and controlling work | | |
| | flow of teams. | | |
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| HR Office Use Only | |
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| SAP Position Number: | |
| Grade: | |
| Effective Date: | Click here to enter a date. |

