

Job Description

Senior Research Software Engineer (Management) – Digital Institute

Faculty of Science, Agriculture & Engineering

Main Purpose

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The position of Senior Research Software Engineer (RSE) for the Digital Institute (DI) plays an essential role in leading the Institute's technical effort. The post holder is responsible for leading the delivery of technical projects through the managing and allocating of RSE resource across multiple simultaneous projects. They are expected to lead collaborations with researchers, supporting the use of relevant technologies and contribute software engineering skills and project management skills into the research project. The post holder will be expected to manage multiple other RSEs and play an important role in contributing to strategic planning within the DI.

Main Duties and Responsibilities

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1. Responsible for leading the delivery of DI projects, assisting collaborating researchers through the use of significant technical skills and project management.
 2. Line management of RSEs and management of the RSE team workload including resource allocation and project forecasting.
 3. To be the technical lead in research funding bids with the aim of selecting technically feasible projects with the potential to transform research.
 4. To lead on the selection and use of software and data infrastructure, including technologies for version control, continuous integration, deployment and code review.
 5. Collaborate with researchers to develop appropriate technical solutions to research problems.
 6. Provide expert advice and assistance to clients and colleagues in problem-solving relating to DI activities.
 7. Present work and provide updates, including the effective communication of complex or technical information, at project meetings and events.
 8. Developer and deliver training and support for DI technical staff and researchers to ensure effective use of relevant technologies.
 9. Represent the DI and disseminate information about the DI and its work at national and international events.
 10. Measure RSE team performance, capturing the evidence of the impact of team activities and disseminate those outputs.
 11. Contribute to learning and development at the DI through the provision of documentation, training and advice in order to support the wider research community.



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12. Undertake relevant training and development activities in order to develop an awareness of own professional development needs.
13. Maintain and develop knowledge to keep abreast of the latest/most relevant technologies.
14. Any other duties within the scope and general nature of the grade which may be required.

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 research or commercial environment	E
3	Understanding of software development tools and methodologies, including programming languages, documentation, testing, version control, issue tracking, and continuous integration	E
4	Track record of developing software that is used by others	E
5	Ability to manage own work, including planning and execution	E
6	Understanding of a range of data manipulation methods and tools	D
7	Experience of working in wide variety of application domains	E



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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	E
9	Experience of deployment and management of complex software solutions onto cloud infrastructure	D
10	Cross-organisation collaboration on software development projects	D
Attributes and Behaviours		
Delivering Service	Works continually towards achieving success 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 Solutions	Generates a range of viable options and decides 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 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 Others	Understands individual or group motives, 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 Organising	Works in a planned and structured way, uses own 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.	

HR Office Use Only

SAP Position Number:

Grade:

Effective Date:

[Click here to enter a date.](#)



Human Resources