POSITION DESCRIPTION

Position Title: Data Analyst
Organisation Unit: Institute for Teaching and Learning Innovation (ITaLI)
Position Number: 3027450
Type of Employment: Full Time, Fixed term for 2 years
Classification: HEW Level 7

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver knowledge leadership for a better world.

UQ ranks in the world’s top universities, as measured by several key independent ranking, including the CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (40), the US News Best Global Universities Rankings (42), QS World University Rankings (47), Academic Ranking of World Universities (54), and the Times Higher Education World University Rankings (66). Excluding the award component, UQ is now ranked 45th in the world in the ARWU, and is one of the only two Australian universities to be included in the global top 50.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland’s highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia’s Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 53,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 17,000 international students from 135 countries, adding to its proud 260,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a $2.15 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.

UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+. UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.
Organisational Environment

The Institute for Teaching and Learning Innovation (ITaLI) is taking a leading role in teaching and learning, professional education and innovation. ITaLI is an integrated teaching, research and service delivery centre for teaching and learning practices at UQ. ITaLI seeks to establish and maintain a flexible operating structure to drive and support innovation and excellence for these activities.

Under the Leadership of the Director, ITaLI, the Institute provides leadership, engagement and advocacy in educational innovation, teaching excellence and learning analytics, and aims to transform teaching and learning across the University through the delivery of faculty and executive prioritised, teaching and learning projects and services. ITaLI addresses critical areas of unmet need in teaching and learning by bridging the gap between the exponentially-expanding discipline of higher education teaching and the increasing complexity of teaching to assist University teaching staff and improve the learning experience of students.

Information about ITaLI may be accessed on the Institute’s web site at www.itali.uq.edu.au.

Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available online.

DUTY STATEMENT

Primary Purpose of Position

As a member of the Learning Analytics team, the primary purpose the Data Analyst position is to support and inform the design and implementation of data-driven solutions to enhance student learning.

This position spans the learning analytics portfolio with a particular focus on processing data originating from teaching and learning systems (i.e., Learning Management Systems and associated plugins), designing self-serve dashboards and contributing to the validation of course, program and student risk models.

Duties

Duties and responsibilities include, but are not limited to:

- Develop big data processing pipelines using Kubeflow and PySpark for data originating from Learning Management Systems (e.g., Blackboard and edX) and learning tools (e.g., Echo360 and Kaltura).
- Conduct qualitative and quantitative data analysis.
- Use a range of tools (i.e., Jupyter Notebook, Business Objects, Tableau), libraries (i.e. SciKit Learn) and programming languages (i.e., Python, R, SPSS) to perform analysis of qualitative and quantitative data and visualise results.
- Provide support for learning analytics activities including development of data visualisations and dashboard user interfaces.
- Assist in the development and validation of custom student, course and program risk models.
- Assist staff in understanding and interpreting statistical concepts, visualisations and application of custom student, course and program risk models.
- Prepare proposals, procedural guidelines, reports, correspondence and publications.
- Conduct interviews, focus groups and utilise observation data collection strategies for projects as required.
- Provide information management and data analysis services to inform and improve business analysis and reporting activities.
• Explore data to identify opportunities to enhance the student experience and advance teaching and learning at the University.
• Develop an understanding of academic processes, goals and strategies in order to provide analysis and interpretation to the academic community.
• Engage in capacity building activities, including facilitating workshops and working parties.

Other
• Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:
  o the University’s Code of Conduct
  o requirements of the Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute/School
  o the adoption of sustainable practices in all work activities and compliance with associated legislation and related University sustainability responsibilities and procedures
  o requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related responsibilities and procedures developed by the University

Organisational Relationships
The position reports to the Manager, Learning Tools and Analytics, Institute for Teaching and Learning Innovation.

SELECTION CRITERIA

• Degree in a relevant academic discipline (Data Science, Computer Science, Education, etc) with at least four (4) years subsequent relevant experience or; extensive experience and expertise in data analysis related to education, learning and instructional design or similar; or an equivalent combination of relevant experience and/or education/training.
• Experience with a range of tools (Jupyter Notebook, Business Objects, Tableau, SuperSet) and data science programming languages (Python and R) to perform analysis and visualise results.
• Experience working in a time-pressured environment, with the ability to balance the competing demands and priorities of multiple stakeholders.
• Excellent communication skills (written, verbal and presentation), with experience in liaising with internal and external stakeholders, and the ability to provide advice.
• Experience in big data processing using Amazon Web Services technologies (eg Data Lake, Spark, Athena, KubeFlow and ElasticSearch).

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University’s Diversity and Inclusion webpage for further information and points of contact if you require additional support.

This role is a full-time position; however flexible working arrangements may be negotiated.

Accessibility requirements and/or adjustments can be directed to recruitment@uq.edu.au.