Faculty of Arts

Data Scientist - Humanities and Social Sciences (2 positions)

POSITION NO	0049280
CLASSIFICATION STANDARD	Level A
SALARY	$72,083 - $97,812 p.a. (pro rata)
SUPERANNUATION	Employer contribution of 9.5% (pro rata)
EMPLOYMENT TYPE	Full-time (fixed-term) position available until 31 December 2020
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Name Associate Professor Nick Thieberger Tel +61 3 8344 8952 Email thien@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our websites:

about.unimelb.edu.au/careers
joining.unimelb.edu.au

Position Summary

The Faculty of Arts and the Graduate School of Education at the University of Melbourne are seeking to appoint two Data Scientists. This unique and new opportunity for data scientists to be embedded with Humanities and Social Sciences (HASS) researchers will be responsible for delivering computing, visualisation and informatics expertise across a range of digital research projects at the University.

Working as a member of the SCIP team, each Data Scientist will have specialist information technology expertise to support projects which may include: data science and analysis; digital ethnography, archeology and heritage; data and information visualisation; metadata specification and modelling for diverse media including text, AV and VR; social media scraping; web design; research tool design, training and documentation; needs assessment; and data curation methods to assure sustainability. We will seek complementary skills in the Data Scientists, ranging from user interface design and data visualisation to software engineering.

The Humanities and Social Sciences Data Scientist will be based within the Social & Cultural Informatics Platform under the direct report and supervision of the Platform Manager, and the team will be housed in the two supporting Faculties. SCIP is a University of Melbourne initiative to support digital scholarship, strategic partnerships and engagement between HASS academics and the Melbourne Data Analytics Platform, Scholarly Services, Research Platform Services; as well as to support the University's participation in the national research infrastructure landscape.

1. Selection Criteria

1.1 ESSENTIAL

- A degree in information systems with relevant experience in the Humanities, Social Sciences, Education, Visual or Performing Arts; or an equivalent combination of relevant experience and/or education/training in digital humanities or social science research support.

- Demonstrated experience in working with data within a research context, and familiarity with current data research techniques. A working knowledge of modern programming languages including one of Python and/or R and familiarity with json and javascript.

- Demonstrated ability to work closely with researchers, understand their research processes and translate or enhance research data through digital humanities methodologies.

- Demonstrated capacity to identify, implement and develop skills in digital data curation, mapping, visualisation, 3D modelling or archiving tools.

- Demonstrated ability to work independently, and to collaborate as part of a team with a diverse range of skills and duties. Good time management, and organisational skills.

- Excellent communication, written, and interpersonal skills with a high level of presentation skills and the ability to effectively communicate on complex technical issues with technical and non-technical audiences.

- Demonstrated commitment to Open Science through prior work with open source publishing, open data repositories, or equivalent.

1.2 DESIRABLE

- A post-graduate qualification in information systems, interactive design or related digital technologies, with some background or understanding of the humanities and social sciences.

- Experience in the application of data science, statistical modelling and machine learning technologies to a variety of complex data sets and collections, (material, born-digital and computational), and an understanding of the Text Encoding Initiative.

- Experience in eliciting user requirements through consultation and problem solving, with design solutions that meet time constraints.

- Knowledge of principles, policies and codes for Data Curation, Intellectual Property and Rights management.

- Knowledge of survey data collection and analysis tools, video, still photography and audio recording equipment, statistical analysis, and web development skills.

- Current knowledge of the Australian Higher Education landscape and understanding of research environment in a University.

- An entrepreneurial spirit, showing a willingness and enthusiasm to take SCIP results to a wider community.

2. Special Requirements

- Work outside the usual span of hours may be required to meet SCIP user requirements.

3. Key Responsibilities

- Providing support to enhance research projects and research activities by initiating, building, and utilising a range of digital research platforms and tools.

- Identification, registration and planning of advice for research datasets held by members of the academic Faculty partners and platform clients.

- Actively design, program and implement methods and tools for data conversion and curation, interactive data, data citation and visualisation that have innovative or bespoke outcomes for academic Faculty partners and platform clients.

- Regular monitoring and reporting on projects, activities, and platform outcomes and objectives across a number of sites and partners.

- Coordinate documentation of needs and requirements for social and cultural informatics, as expressed by members of the academic Faculty partners.

- Other duties as directed by the Platform Manager.

- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5 or 6.

3.1 LEVEL OF SUPERVISION / INDEPENDENCE

The position will work under the broad direction of the SCIP Platform Manager. In the execution of the role, the incumbent will be required to work collaboratively as a part of a team planning and executing work across a range of projects. With advanced technical skills and the ability to initiate contact, liaise with researchers, and work with key professional staff, the role will be

responsible for the successful delivery of quality projects and development of researcher focused tools.

3.2 PROBLEM SOLVING AND JUDGEMENT

The Data Scientist-HASS will be required to actively identify methods and tools to ensure robust data curation and analysis. The role requires the incumbent to apply critical thinking and sound judgment in order to successfully deliver on project outcomes and objectives, which will be located across a number of sites.

3.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE

The Data Scientist-HASS will be supported to develop a sound understanding of the University landscape to successfully collaborate with researchers, Faculty partners, and non-partner Faculties where appropriate. The incumbent will be expected to identify and report on gaps in research support provisions and assist in organising, processing and analysing research data where required. Capability to explore and implement innovative data project solutions will be encouraged in the role.

3.4 RESOURCE MANAGEMENT

The Data Scientist-HASS will work with equipment, software, digital collections, and may be required to monitor and advise on project resources. This position will have no budget or supervisory responsibilities.

3.5 BREADTH OF THE POSITION

The Data Scientist- HASS will be required to collaborate with a broad range of SCIP partners within the University of Melbourne. While SCIP and the position will be administratively located within the Faculty context, the incumbent will work with key personnel in selected University units, and in close collaboration with other SCIP users and stakeholders, including the Petascale Initiative.

3.6 ORGANISATION UNIT

www.arts.unimelb.edu.au/soll

http://www.dynamicsoflanguage.edu.au/

3.7 BUDGET DIVISION

http://arts.unimelb.edu.au/

The Faculty of Arts is at the forefront of teaching and research in the languages, humanities and social sciences fields in Australia and in many cases internationally. Founded in 1853, the Faculty of Arts is one of Australia's oldest and largest faculties with approximately 400 staff and 8000 students engaged in over 900 subjects in more than 40 areas of study. As Australia's premier Arts faculty, it aims to provide an exciting, high-quality intellectual environment that will attract the best students and staff across a wide range of disciplines.

The Faculty of Arts maintains strong connections with leading international universities through research collaborations and student exchange programs, and nurtures relationships with government, not-for- profit and private organisations through student internship placements, research projects and community engagement.

As well as housing the Graduate School of Humanities and Social Sciences, the Faculty of Arts also comprises five academic schools:

- Asia Institute
- School of Culture and Communication
- School of Historical and Philosophical Studies
- School of Languages and Linguistics
- School of Social and Political Sciences

Our students and staff are supported by business units within the Faculty including:

- The Office of the Dean and Faculty Executive Director
- The Academic Support Office
- The Strategy, Planning and Resources Unit
- The External Relations Unit
- The Research Office
- The Human Resources Office

For more information on the Faculty please see www.arts.unimelb.edu.au

3.8 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

3.9 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. http://about.unimelb.edu.au/strategy-and-leadership

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic

breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. http://research.unimelb.edu.au/our-research/research-at-melbourne

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

- Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

- Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

- Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

3.10 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at http://www.unimelb.edu.au/governance

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

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