



RESEARCH MANAGER - SENIOR RESEARCH FELLOW

DEPARTMENT/UNIT Data Science

FACULTY/DIVISION Faculty of Information Technology

CLASSIFICATION Level C

WORK LOCATION Clayton campus

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **Faculty of Information Technology** is represented on two campuses in Australia – Caulfield and Clayton – and in Kuala Lumpur, Suzhou and Johannesburg. It undertakes teaching and research across a broad range of information technology disciplines: computer science, computational science, data science, intelligent systems, software engineering, network computing (including distributed, wireless and mobile computing), information systems (including enterprise systems), business intelligence and decision support, multimedia computing and applications, information management (including archival and library systems), and knowledge management.

We are one of the few faculties of information technology in the world and one of the largest academic information technology units within a tertiary institution in the world. Its research-intensive, multidisciplinary, international capabilities provide it with a set of exciting teaching, research, and engagement opportunities that position it uniquely within the tertiary sector.

This position is a part of a large international project, **Bayesian ARgumentation via Delphi** (BARD), aimed at using Bayesian network technology in argument analysis, within the large CREATE (Crowdsourcing Evidence, Argumentation, Thinking and Evaluation) program run by the US government's IARPA. BARD is a consortium led by Monash and including external research teams at Birkbeck College University of London, University College London and Strathclyde University. The CREATE projects are intended to run for 4.5 years in total, from Jan 2017 through to June 2021. The BARD project is looking for an academic Research Manager to join the project for Phases 2 and 3.

Modified date: August 2018

POSITION PURPOSE

The primary responsibility of the BARD Research Manager will be to drive the research outcomes of the BARD project to ensure that these outcomes reflect the goals of the project. This will be achieved by working with each of the research teams and coordinating their research output across the BARD Project. Frequent and effective communications between the research teams and other internal BARD teams will be critical to the success of this role. Some travel to the UK will also be required.

The main research efforts within BARD are: designing new means of interacting with and using Bayesian networks for analysing problems in intelligence analysis; designing new means of analysing and explaining Bayesian network models; designing and analysing human experiments using BARD tools.

In addition to the Research Manager responsibility, the Senior Research Fellow will also contribute to the research and experimental work of individual BARD Teams as appropriate and help to communicate the progress and achievements of the Project to IARPA and the academic community. Generally, a Level C research-only academic is expected to make independent or original contributions to the research effort within their field of expertise and to the organisational unit or inter-disciplinary area of which they are a part.

Reporting Line: The position reports to the BARD Chief Investigator, Professor Ann Nicholson

Supervisory Responsibilities: This position provides direct supervision to Research personnel

Financial Delegation: Yes, in accordance with the University delegations schedule

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level C research-only academic may include:

- 1. Supervision of research-support and administrative staff involved in the Project's research
- 2. Supervision, where appropriate, of the research of less senior research-only Academic staff
- 3. Involvement, where appropriate, in the promotion of research links with outside bodies
- 4. Preparation of research proposal submissions to external funding bodies
- 5. Leadership of the BARD research team and be a member of the BARD Management team
- **6.** Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars as required for the BARD Project research
- 7. Coordination of Project Research Teams by conducting regular meetings with each Research team and regular travel to visit and coordinate all BARD Research Teams, and represent BARD Research at IARPA Meetings and site visits
- 8. Oversee current and projected progress of all Teams and consult all teams about future needs and plans
- **9.** Assess how Project output can be improved and devise corresponding adjustments to task allocation and planning
- **10.** Communicate to all Team Heads the progress and needs of other Teams and overall Project directions keeping the Management Team informed of all aspects of research coordination
- **11.** Contribute to BARD Project research as opportunities arise and where there is alignment with areas of expertise
- 12. Communicate Research both within the Project and externally
- 13. Production of reports, conference and seminar papers and publications arising from BARD research

KEY SELECTION CRITERIA

Education/Qualifications

- 1. The appointee will have:
 - A doctoral qualification in Artificial Intelligence, Cognitive or Social Psychology, Philosophy of Argumentation or equivalent accreditation and standing together with subsequent research experience

Knowledge and Skills

- 2. Experience in managing large multinational, multidiscipline research projects
- 3. Proven track record in preparing research proposal submissions to external funding bodies
- **4.** Excellent written and oral communication skills including the ability to prepare and communicate research strategy and vision to multinational, and multi discipline research teams
- **5.** Experience in collaborating towards and coordinating the research output of multinational, and multi discipline research teams
- **6.** Demonstrated ability to engage and influence senior stakeholders both internal and external to support research objectives that align to the vision of the BARD project
- 7. Experience in successfully supervising, mentoring and coaching to support the development of research staff and in establishing and leading a successful research team and/or demonstrated evidence of leadership capability
- **8.** High-level organisational skills, including the ability to plan and manage the use of research funds, with demonstrated capacity to establish and achieve goals
- 9. Experience in supervising and working with research students and/or postdoctoral researchers
- 10. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
- **11.** A strong background in one or more of the following will be an advantage: probability and statistics; psychology; artificial intelligence; Bayesian networks; experimental methods; informal logic and argumentation theory; data analysis; research administration
- **12.** Demonstrated record of publications, conference papers, reports and/or professional and/or technical contributions in the relevant discipline area

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- International travel may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

LEGAL COMPLIANCE

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.