

UNIVERSITY OF OTAGO
Te Whare Wananga o Otago

JOB DESCRIPTION

JOB TITLE: Research Assistant (Fixed-term)
DEPARTMENT: Information Science
SCHOOL & DIVISION: Commerce

1. PRIME FUNCTION

To develop and integrate research software supporting the evaluation of computational methods in the field of normative multi-agent systems.

2. MAIN OBJECTIVES

The appointee will work on the development of multi-agent simulations for evaluating computational theories related to the achievement of collective action in multi-agent systems. This will involve building simulation scenarios using an existing agent-based simulation platform, as well as integrating this platform with other software.

3. KEY TASKS

- Developing software, mostly in the Java language, but basic use of AgentSpeak and Prolog may also be required
- Following good software engineering practices in the use of a code repository and testing
- Running simulation experiments and recording the results
- Producing documentation for all work performed.

4. RELATIONSHIPS

- **Directly responsible to:** Prof. Stephen Cranefield
- **Supervised by:** Prof. Stephen Cranefield
Does the person assist in staff recruitment, etc? No
Does the person address staff performance issues? No
Does the person undertake Performance Development Reviews (PDR)? No
Does the person allocate tasks to staff? No
- **Functional relationships with:** Staff and postgraduate students involved in related research projects, Prof. Jeremy Pitt from Imperial College, London

5. BUDGETARY RESPONSIBILITY

N/A

6. EXPECTED OUTCOMES

- An integration of the Presage2 agent simulation framework with the Jason agent programming platform and a Prolog programme
- Simulations of scenarios related to collective action, to be specified by the supervisor
- Recorded and interpreted data regarding the performance of the simulations.

7. PERSON SPECIFICATION

The candidate should have completed a degree with some research content, such as an Honours degree. This position requires knowledge of or interest and ability to learn concepts and techniques from the field of normative multi-agent systems. Software development skills in Java are essential and knowledge of logic and/or logic programming would be an advantage. The candidate should also have good communication skills, including the ability to produce clearly-written technical documents.

SALARY RANGE AND LEVEL

The salary scale applying to Research Assistants consists of four levels ranging from \$34,489 to \$47,364 per annum. Appointment salary depends on the requirements of the particular position. The appointment salary for this position is expected to be \$44,401 (pro rata to the hours of work required). Movement from one level to another is by decision of the employer based on changes in the requirements of the position.

CONTACT PERSON

For further information, please contact Prof. Stephen Cranefield, Information Science, Tel 03 +64 (0) 3 479 8083, Email stephen.cranefield@otago.ac.nz

Should the University wish to offer you the position, a formal, written letter of offer will follow any verbal discussions that might be held with you. It is recommended that you do not resign from your current employment until you have received our written offer. The contents of this formal letter of offer and its attachments will constitute the entire agreement between the employee and the employer, and will supersede all previous representations, negotiations, commitments and communications, either written or oral between the parties. Any agreements will only be binding on the employer where they have been formally offered by the Human Resources Division and accepted by the employee.

While this position is open to applications from outside of Dunedin, New Zealand, unless otherwise stated relocation assistance will **not** be available should the successful applicant currently reside elsewhere in the country or world.

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