



## POSITION DESCRIPTION

<b>Job Title:</b>	Research Officer/Research Fellow: Biologically-inspired robot navigation
<b>Organisation Unit:</b>	Thinking Systems Project
<b>Reference Number:</b>	A collaborative Project involving QBI, ITEE, SBS and SPS TSP003
<b>Type of Employment:</b>	Fixed Term
<b>Classification:</b>	Research Academic Level A or B
<b>Remuneration:</b>	Base salary range from \$56,377.42 to \$60,518.20 per annum (Level A), or \$63,703.70 to \$75,647.94 per annum (Level B), plus employer superannuation of 17% of salary; and any other cash benefits, such as allowances or loadings.
<b>Closing Date:</b>	
<b>Further Information:</b>	Helen Staunton (07) 3346 7383 Visit the <a href="#">Thinking Systems</a> website

### BACKGROUND

#### **Thinking Systems: Navigating through real and conceptual spaces**

The Thinking Systems Project is an ARC Special Research Initiative jointly funded by the Australian Research Council and the National Health and Medical Research Council.

This project brings together a cross-disciplinary, collaborative and cross-institutional team to study fundamental issues in how information is transmitted, received, processed and understood in biological and artificial systems. The core of the project is studying how brains understand spatial systems, both physical and conceptual. This integrated approach will lead to an increased understanding of neural, behavioural and information processing bases of thinking systems. Insights from neurocognitive systems will be used to develop computational models, autonomous robots and intelligent software agents which in turn will lead to deeper understanding of the relationship between neurocognitive mechanisms and their behaviour in whole systems.

#### **Information for Prospective Staff**

Information about the University, State of Queensland, living in Brisbane and employment at the University is at the University's web site. (<http://www.uq.edu.au/>) For a comprehensive guide to family friendly work practices and services visit the Work and Family web site at <http://www.uq.edu.au/equity/index.html?page=11661>

The University of Queensland Enterprise agreement (Academic Staff) outlines the position classification standards for Levels A to E.

## **DUTY STATEMENT**

### **Primary Purpose of Position**

This position involves developing and testing autonomous robots using algorithms for navigation derived from the neural and behavioural studies in other themes of the project, as well as the design and development of the service robot demonstrator.

### **Duties**

Duties and responsibilities include, but are not limited to:

- Design, develop and test the algorithms in both simulation environments and real robots.
- Perform a range of administrative functions as required.
- Comply with the University's Code of Conduct (see the University's web site at <http://www.uq.edu.au/staff/employment/> )
- Comply with requirements of Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or School.

### **Reporting Relationships**

The position reports to the Chief Investigators of the project.

## **SELECTION CRITERIA**

### **Qualifications**

#### Essential

- PhD

### **Knowledge, Skills and Experience**

#### Essential

- Experience in mobile robot navigation
- Experience in neurally inspired algorithms
- Experience in using and developing mobile robot platforms
- Active interest in animal navigation
- Track record of high quality peer-reviewed publications

#### Desirable

- Excellent software engineering skills
- Knowledge of neurocognitive models of navigation
- Experience in embedded hardware / software design for robot applications
- 

### **Personal Qualities**

#### Essential

- Demonstrated high level interpersonal skills including the ability to collaborate across disciplines
- Demonstrated high level written and oral communication skills including the ability to research and write reports
- Ability to work effectively both independently and as a member of a team.

## APPLICATION

Applications must consist of the following:

1. Covering Letter. The covering letter should include the vacancy reference number, your contact address and telephone number. It is an opportunity in not more than one page to introduce yourself and highlight the key reasons you should be considered for the role. If you wish to be considered for more than one role in the New Thinking Systems Project please specify this in the covering letter.
2. Resume or Curriculum Vitae. A resume is a brief history of your employment and experience that covers the following areas:
  - Educational qualifications and professional affiliations that detail the full title of the qualification, the year awarded and the title of the institution attended;
  - Employment history in chronological order, starting with current position and specifying dates of employment, title of each position, name of employer, main duties or accountabilities and achievements; and
  - The names and contact details (address, telephone, fax and e-mail) of three referees, including if possible a senior person (preferably your supervisor or the head of your organisational unit) closely associated with your current work.
3. Selection Criteria. A statement addressing how each of the selection criteria have been met is required to assist the Selection Committee determine whether you have the relevant qualifications, knowledge/skills, experience and personal qualities.

An academic curriculum vitae should include research fields and current interests, publications (full list as attachment with three most significant marked with an asterisk), research grants awarded and, if applicable, details of teaching evaluation.

### **Applications are to be sent to:**

Helen Staunton  
Human Resource Advisor  
Queensland Brain Institute  
The University of Queensland  
Brisbane QLD 4072

Or email: [applications@qbi.uq.edu.au](mailto:applications@qbi.uq.edu.au)

### **Please note:**

- Applications should be typed;
- Do not send applications that are bound or enclosed in plastic or manilla folders;
- Simply staple the application at the top left hand corner; and
- Retain a copy for your reference because the University does not return copies to applicants.

## **SELECTION PROCESS**

A Selection Committee will consider all applications and shortlist candidates for interview who appear to meet the selection criteria at the highest levels. They will be invited to attend an interview and the remaining unsuccessful applicants will be notified accordingly.

An invitation to attend an interview provides an opportunity to provide further information to the Selection Committee to substantiate your claims against the selection criteria or demonstrate your capabilities. Please note that for some positions interviews may be conducted by teleconference in the first instance.

The Selection Committee will subsequently seek referee reports, if not sought prior to interview, before making a decision to make an offer of appointment to the preferred candidate. The purpose of referee checks is to obtain, in confidence, factual information about your past work history, as well as opinions regarding the quality of your work, behaviour in the work place and suitability for the position. Referee reports may be sought orally, or for academic staff, in writing by post or e-mail.

Referees should normally include current supervisors or and/or managers. A referee must be able to comment on your work experience, skills and performance with respect to the selection criteria. Referee checks conducted after the interview process can sometimes delay notification of the successful candidate and other interviewees.

If you are the preferred candidate, you will receive a written offer of appointment to the position. Do not take any action, such as resigning from your current position, before you receive a **written offer** of appointment.

**The University of Queensland is an equal opportunity employer.**

Smoking is prohibited in all University buildings.