

Position Title: Research Associate / Research Fellow

Position Classification: Level A/B

Position Number: 316409, 316410

Faculty/Office: Faculty of Science

School/Division: School of Psychological Science

Centre/Section: Human Factors and Applied Cognition Laboratory (Loft)

The Learning, Attention and Behaviour Laboratory (Visser)

Supervisor Title: Associate Professor

Supervisor Position Number: 307400, 310316

Your work area

The School of Psychological Science at UWA has a proud record of graduating first-rate scientists and practitioners. UWA received the top ranking of 5 for Psychology in all rounds (2010, 2012, 2015) of the Commonwealth Research Assessment Exercise (ERA). UWA Psychology provides advanced postgraduate training through many programs, including the Master and the combined Master and PhD program in Industrial and Organisational psychology. The School has strong links with the Business School and Engineering School, with collaborations including the Accelerated Learning Laboratory and the Centre for Safety. The School also has strong links with many industry partners including the Defence Science and Technology Group.

Reporting Structure

Reports to: Associate Professors (307400, 310316)

If a leadership/ supervisory role:

Direct Reports: NA

Your role

We are seeking a dynamic research associate with a track record of academic excellence and a passion for Applied Cognition/Human Factors research. There are two positions available that have been funded by the Defence Science and Technology Group (DST Group).

One the post-doctoral researchers will work on the project "Human Performance in the Submarine Command Team". The project will be led by Associate Professor Shayne Loft in the Human Factors and Applied Cognitive Psychology (HUFAC) Laboratory (http://www.hufac.net/). The work will be conducted in collaboration with Dr Sam Huf and Dr Peter Henley from the DST Group, and Associate Professor Troy Visser (UWA) and Professor Paul Salmon (University of the Sunshine Coast).

The DST Group is currently attempting to clarify both the risks to human performance and the opportunities to enhance human performance that might present themselves as Royal Australian Navy transitions to a new submarine platform. The appointee will be responsible for designing and implementing an experimentation program that will examine command team performance parameters. The researcher will work as a member of a multi-disciplinary team from UWA, DST Group and external software engineering service providers. The appointee will be based at UWA but will spend significant periods of time at HMAS Stirling (Garden Island).

The other post-doctoral researcher will work on the project "Selection, training and intervention strategies to improve warfighter situation awareness". This project will be led by Associate Professor Troy Visser in the Learning, Attention & Behaviour Laboratory (http://www.visserlab.org/). The project is funded by the Defence Science and Technology Group (DST Group) as part of the Australian Army's

new Human Performance Research Network (HPRnet), which extends across seven Australian universities, and functions in close collaboration with army personnel.

The chief focus of HPRnet is human performance modernisation - enhancing and improving the capabilities of personnel across a wide range of duties. The appointee will be responsible for designing and implementing an experimentation program that will examine the relationship between cognitive skills and situation awareness, including the development of training programs and assessment measures. The researcher will work as a member of a multi-disciplinary team from UWA, DST Group and the Australian Army. The appointee will be based at UWA but may be required to spend some periods at armed forces facilities in Australia.

The School of Psychology has world-class scholars and offers an outstanding environment in which to shape and develop a research career. Associate Professor Shayne Loft and Associate Professor Troy Visser have a long and strong track record of collaborating with the DST Group to produce high quality research publications and practical deliverables. A key objective of the research program will be to publish the research in high quality international journals and to deliver practical outcomes for Defence.

Facilities across the two laboratories include a medium-fidelity driving simulator, access to submarine track management, air traffic control and unmanned vehicle control simulators, extensive behavioural testing equipment, eye-tracking and physiological recording equipment. As part of the research the HUFAC laboratory will be building a medium-fidelity submarine control-room-use-simulation-environment (CRUSE).

Key responsibilities

Planning and design of the research

Conduct literature reviews and develop theoretical propositions

Design and prepare materials for research studies

Undertake and supervise research activities to collect data

Manage a research team (i.e., research assistants and honours/masters students)

Analyse results using statistical techniques (e.g., ANOVA, t-tests, regression)

Lead and contribute to high quality academic paper

Lead and contribute to reports to industry or other partners

Present results at academic conferences

Apply for other sources of research funding where relevant

Other duties as directed

Your specific work capabilities (selection criteria)

Relevant PhD qualification in experimental psychology, cognitive psychology, human factors (ergonomics) psychology, or a closely related discipline

Skills in computer programming (e.g., Matlab, Presentation, Unity)

Highly developed written and verbal communication skills including evidence of high quality written work

Evidence of academic productivity (e.g. quality peer-reviewed publications, awards etc)

Knowledge/research experience of Human Factors topics such as Situation Awareness, Workload, Attention/Multi-tasking, Expertise, Decision-Making, and Teamwork

A basic level of computer programming and other computer technical skills

Skills in statistical analyses

Track record of using initiative and working in professional manner

Ability to build relationships and work in a research team

Willingness and ability to supervise Honours and Masters students

Special Requirements

Applicants for this position must hold an Australian Citizenship as per the employment eligibility of the Defence Science and Technology Group.

Compliance

Workplace Health and Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at http://www.safety.uwa.edu.au

Equity and Diversity

All staff members are required to comply with the University's Code of Ethics and Code of Conduct and Equity and Diversity principles. Details of the University policies on these can be accessed at http://www.hr.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au/publications/code_of_ethics,