# University of Wollongong



### POSITION DESCRIPTION

**Academic Positions** 

(In addition to the Position Classification Standards)

Position Title: Associate Research Fellow Level: A

Faculty/Division: Informatics

Department/Location: School of Computer Science & Software Engineering

# Primary Purpose of the Position:

This position will be involved in a research project funded by the by the Australian Research Council Discovery Project. The research will contribute to the research environment within the School, Faculty and University.

### **Position Environment:**

This position will be responsible for conducting research for the project titled, "Attribute-based encryption: new cryptographic framework, constructions and applications towards cloud security" funded by the Australian Research Council Discovery Project. This position will be with the School of Computer Science and Software Engineering at the University of Wollongong.

# Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Writing journal and conference papers	To meet research milestones	
2.	Writing progress reports	Report	
3.	Preparation of manuscripts for publication	Research Papers	
4.	Preparation of conference presentations	Oral or poster presentations	
5.	Co-supervise students (if required)	Students co-supervised	
6.	Perform other duties as required	Duties performed	
7.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
8.	Have OH&S responsibilities, accountabilities and authorities as	To ensure a safe working environment for	
	outlined in the	self & others.	
	http://staff.uow.edu.au/ohs/commitment/responsibilities/ document		

PER-REC-TEM-012 Page 1 of 4

## Reporting Relationships:

Position Reports to:	Professor Willy Susilo
The position supervises the following positions:	N/A
Other Key Contacts:	Professor Yi Mu, Head of School Computer Science and Software Engineering

### **Key Relationships:**

Contact/Organisation: Purpose & Frequency of contact

Professor Willy Susilo To review progress weekly

## Key Challenges:

Acquiring the required theoretical background and perform research at an internationally competitive level.

Proposing new and efficient schemes that are in line with the proposed project funded by the Australia Research Council Discovery Project.

# SELECTION CRITERIA - Knowledge & Skills:

#### Essential:

- Experience in developing functional encryption schemes and attribute-based cryptography. This needs to be demonstrated by excellent publications in top tier journals and/or conferences.
- Good knowledge and experience on the mathematics for cryptography, including pairing based cryptography, finite fields, elliptic curves, etc.
- Good knowledge in provable security techniques in both the standard model and the random oracle model.
- Very good track records in cryptography literature.

#### Desirable:

Strong organisational and interpersonal skills

# SELECTION CRITERIA - Education & Experience:

#### Essential:

- PhD in Cryptography, Computer Security, Mathematics, Computer Science or related area
- Research experience in Functional Encryptions and/or Attribute-based Encryptions

#### Desirable:

- Demonstrated capacity to undertake collaborative research.
- Demonstrated competence in report writing and manuscript preparation.

#### Personal Attributes:

- Demonstrated capability to work collaboratively.
- Good interpersonal skill.

## Special Job Requirements:

n/a

## Approval:

PER-REC-TEM-012 Page 2 of 4

Approved by Head of Unit:	 
Date:	 
Approved by Personnel:	 
Date:	 

University of Wollongong



### POSITION CLASSIFICATION STANDARD - Research Only

Level: A

Title: Associate Fellow

### Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

### **General Standard**

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

### **Specific Duties**

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

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

### Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.

PER-REC-TEM-012 Page 4 of 4