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POSITION DESCRIPTION

Research Assistant

Position Level	5-6
Faculty/Division	Engineering
Position Number	00105523
Original document creation	14/09/2022

Position Summary

The position in the School of Computer Science and Engineering is funded by a grant from the UNSW Centre for Critical Digital Infrastructure for a short term (3 month) project to conduct exploratory research on the application of blockchain to privacy preserving scientific data set lifecycle management and archival storage. The project will explore the application of emerging technologies including Filecoin, IPFS and privacy preserving blockchains such as Oasis Labs in the context of tools for the management of the lifecycle of the datasets collected and maintained by privacy sensitive scientific research projects (such as in the medical domain). Subject to success of a current grant application, this project may form the basis of a longer term research project. The position may be available on a part-time basis.

The role of Research Assistant reports to Prof. Ron van der Meyden and Dr Helen Paik and has no direct reports.

Accountabilities

Specific accountabilities for this role include:

- Conducting literature review on the capabilities of the platforms to be investigated and the project objectives.

- Establishing testnets and installations of development environments for the software platforms to be investigated.

- Designing, programming, documenting and testing project software.

- Collect material for research projects and assist with the preparation of publications on the project

- Ensure maintenance of the software and hardware environment of the project.

- Run experiments, process and collate information

- Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct

- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health & safety of yourself or others.

Skills and Experience

- (Highly Desirable) An honours degree in computer science

- (Desirable) A postgraduate research degree (Masters or PhD)

- Knowledge of and experience in the use of blockchain platforms, particularly Filecoin, IPFS, Oasis.

- Understanding of distributed computing and computer networks

- Knowledge and experience of imperative programming, particularly C, Javascript and Web-3 libraries.

- Experience with the use of tools applying logic in computer science

- Knowledge and experience with UNIX operating system

- Effective interpersonal skills with demonstrated ability to communicate and interact with a diverse range of stakeholders.

- Demonstrated ability to take initiative, work with in a team, and collaborate across disciplines and build effective relationships.

- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.

- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.