

KTP Associate in Computer Science and Cryptography



Role Description

GRADE

Grade 4

LOCATION

Merchiston, Edinburgh

LINE MANAGER

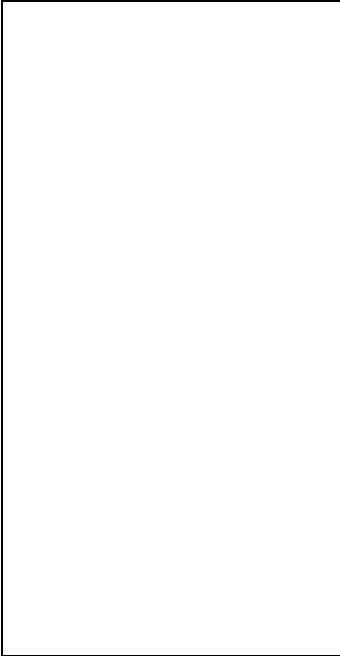
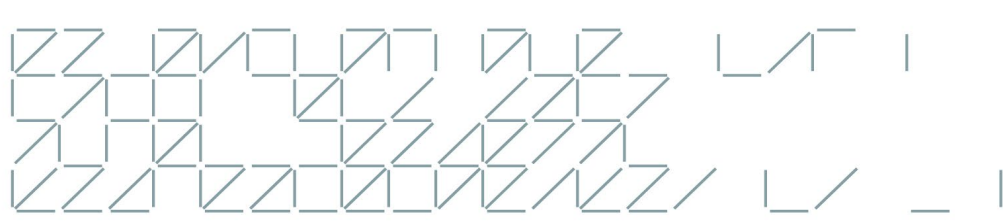
Professor Bill Buchanan

Role Summary

Acubed.IT focuses on cross-domain specialist expertise to build cost-effective cyber-secure solutions and primarily collaborate with the HM Government and the Public Sector. They work with the NCSC (National Cyber Security Centre), and other government departments, supporting the research and development of vital innovative technologies and solutions. Along with this, they have a depth of experience working on cross-government official and higher tier platforms and have partnered with the UK Government to develop the next generation Cross Domain Solutions.

We are looking for a KTP Associate, funded by Innovate UK and Acubed.IT, who will have the opportunity to expand their research through publishing research papers and patents. You will be able to present your results to key stakeholders and build your network through interacting with business partners.

Based on our pioneering new research lab, the Blockpass Identify Lab in Edinburgh – led by Professor Bill Buchanan, you will have the opportunity to expand and enhance your research in the cryptography research area. A key aim of the KTP is to develop Post Quantum Cryptography (PQC) and Homomorphic Encryption, which can be integrated into the Cross Domain Hybrid Application (CDHA) Framework. This will provide a cutting-edge quantum-safe solution which organisations within both the public and



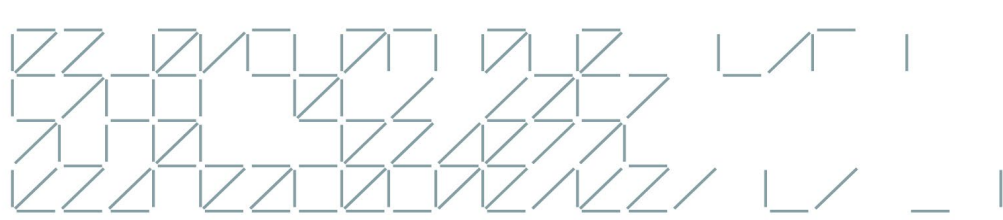
private sectors can use to design and implement secure cross-domain working.

Using your experience in implementing successful projects, you will have the opportunity to build new products and services through the implementation and evaluation of cryptography-based experiments. You will be able to showcase your results through reports and presentations to key external stakeholders.

As someone who has a passion for cryptography, you will carry out and develop code within the relevant areas of cryptography to contribute to the project and support the preparation of new grant proposals.

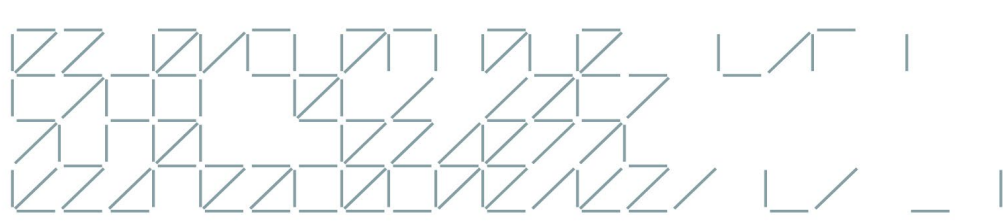
Line Management Responsibility for:

This role does not have any line management responsibilities currently.



Main Duties and Responsibilities

- Carrying out coding within relevant areas of cryptography.
- Develop code in respect to the analysis of cryptography methods.
- Implementation and evaluate cryptography-based experiments, and report on the results.
- Present work to external stakeholders in the form of presentations and report.
- Contributing to project management.
- Support the preparation of new grant proposals.
- Attending project meetings and collaborating with researchers from the Blockpass ID Lab.
- Any other duties as may be reasonably assigned by the line manager.
- Role model the University's values & behaviours.
- Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with ALL applicable legislation, codes and policies e.g. [Data Protection](#), [Information Security](#) and [Records Management](#).



PERSON SPECIFICATION

ESSENTIAL DESIRABLE

Education / Qualifications

- | | | |
|---|---|---|
| • Postgraduate qualification or Hons Degree in a Computer Science or Engineering area | ✓ | |
| • PhD in an area related to Cybersecurity | | ✓ |

Skills / Experience

- | | | |
|---|---|---|
| • Experience of successful implementation of software projects, with a working knowledge of at least one programming language | ✓ | |
| • A passion for cryptography and a core interest in implementation within new products and services | ✓ | |
| • Good project management skills and strong level of organisation skills | ✓ | |
| • Excellent communication skills and report writing | ✓ | |
| • Experience of development in a cybersecurity area | | ✓ |
| • Good knowledge of cryptography methods | | ✓ |