

PhD Studentship in Cloud Security

Background

As information infrastructures move into a Cloud Computing environment, there are increasing risks related to a wide range of issues including privacy, accountability, and availability. The Cloud Security Alliance (CSA) and Edinburgh Napier University thus aim to provide new methods and techniques to address these risks, with a wide ranging collaborative research programme.

PhD Studentships

The studentship is available for research related to the following topics:

- Accountability and transparency in highly distributed systems.
- Interoperability of accountability mechanisms for cloud computing
- Metrics for privacy, transparency and security in cloud environments.
- Security verification and certification of multi-layer cloud services and supply-chains.
- Continuous and incremental verification of security properties of cloud systems.
- Dependency analysis for large-scale composed systems.

Applicants should have at least an upper 2nd class undergraduate degree in computing (or a related subject) and a good MSc in a computing-related area. Knowledge of service oriented and cloud computing, related privacy, security and accountability techniques and/or software systems security assurance and certification is desirable.

The PhD studentship provides an annual bursary of €22,000 for a period of three years and coverage of the corresponding tuition fees. Support for conference travel will also be available where appropriate. The selected applicant is expected to commence his/her studies by the beginning of **November 2012**. The applicant may choose to be based either in Edinburgh, or at CSA's branch in Crete, Greece, subject to agreement of all parties.

Experience and skills focus

The selected candidate will work within a fast-growing team of researchers distributed across Europe, and will work closely with CSA team staff and volunteers in Europe and Asia. Overall the collaboration is look for the following experience and skills:

- High technical competence and strong academic record. Good BA/BS in Computer Science preferred.
- Strong aptitude for information security research within an academic environment at doctoral level.
- Exposure to large scale distributed systems.
- Development experience preferably within a cloud environment.
- Knowledge and experience of information security certification and audit mechanisms.
- Strong sense of accountability, ownership for end-to-end project lifecycle and sound knowledge of project management.

Applying

All the applications should quote the reference **CSA-PHD** and marked for the attention of Professor Bill Buchanan.

For more information on how to apply and an application form, visit

<http://www.napier.ac.uk/research/research-degrees/Pages/Apply.aspx>

For more information on the funding programme, see: <https://cloudsecurityalliance.org/csa-news/csa-phd-studentship-programme/>

For informal enquiries you may contact: **Professor Bill Buchanan** (Email: w.buchanan@napier.ac.uk)

About Edinburgh Napier University and CSA

The research team at Edinburgh Napier University work on a wide range of knowledge exchange and research collaborations, including a number of innovative projects around Cloud-based systems including: a novel e-Health Cloud Platform (cloud4health.com); a new information sharing architecture, and a novel risk-based platform. They currently work with a wide range of collaborators including with law enforcements, industry and the public sector.

The Cloud Security Alliance is a not-for-profit organization with a mission to promote the use of best practices for providing security assurance within Cloud Computing, and to provide education on the uses of Cloud Computing to help secure all other forms of computing. The Cloud Security Alliance is led by a broad coalition of industry practitioners, corporations, associations and other key stakeholders. CSA's portfolio of projects includes national and EU funded research projects (Helix Nebula Science Cloud, A4Cloud, Cumulus and Cirrus). CSA EMEA's research in the projects includes trust enabling mechanisms, assurance and certification frameworks, security policy automation, privacy and accountability.