Cyber Surveillance and related topics

The Cyber Security Centre at UH is interested at the issue of collecting and analysing data from information environments (including virtualisation and IoT technologies) under the context of cyber surveillance.

The IoT includes a diverse set of technologies, use cases and sectors eg national, medical, home user, enterprise, automotive etc. Diverse and disparate datasets will be created, stored, accessed and used in authorised and unauthorised ways by different stakeholders/threat agents.

Surveillance is the close observation of an individual or of an entity/asset.

Under the context of cyber surveillance for risk management there is the challenge of linking and understanding apparently unrelated IoT data. There is already a need to pull together and visualise data from a diverse, sensor-rich, loosely connected environments that operate across different protocols and standards.

We think that fusing and analysing data from network logs, security control logs and system logs will allow for a capability of profiling and monitoring computer user behaviour which in effect will mitigate one of the biggest risks in modern computing infrastructures. Therefore, we are looking for candidates to join our group in designing new methodologies and developing tools to allow for the development of the aforementioned capability.

The prospective candidates should have a strong background in Computer Science or another relevant discipline. In particular, they should demonstrate very strong programming skills in one or more major programming languages. Ideally, they should have some background in the areas of operating systems, computer networks and security.

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