Novalyst IT AG

Novalyst IT is a private research entity for information and communication technology. We are carrying out research and development at the forefront of IT Security. Within the scope of a research project on trusted mobile systems, we are looking for a master student in computer science.

Thesis description

Trusted Computing (TC) as defined by the Trusted Computing Group is usually seen as a protection technology centred on single devices and communication endpoints. But this upcoming technology has many facets which applied information security can benefit from. Seen as a platform-neutral security infrastructure, TC offers ways to establish trust between entities that are otherwise separated by technical boundaries, e.g., different access technologies and access control structures. Commercial applications of TC in this respect abound in particular in the mobile sector.

The thesis work shall explore the possibilities offered by TC to provide trust properties to the human-computer interface. In particular, visual attestation of the state and the identity of a platform, binding of graphical credentials to a device, and visually securing transactions with third parties, are core research subjects.

The realisation of the developed concepts shall use an existing software framework for Trusted computing experimentation.

Requirements

Clear conceptual thinking. Good knowledge of authentication concepts. Elementary Knowledge in cryptography. Elements of Trusted Computing, graphical user interfaces, and biometry. Good programming skills, particularly in Java and C++, and knowledge of contemporary Web-application technology.

We expect the candidate to participate in the scientific publication of his research results. Written and oral fluency in English is essential.

Start

Immediately.

We are looking forward to receiving Your application by e-mail.