Position announcement

The Chair of Software Engineering at the Institute of Computer Science, University of Würzburg is looking to fill the following position:

**Full-time PhD Position in IoT Security and Privacy**

Internet of Things (IoT) is a new and emerging technology which promises to bring our life standard to a revolutionary new level. The key aspect of IoT are smart objects, or “things” that communicate with each other, with remote service providers and user devices such as smartphones and tablets, in order to create a pervasive environment for users and enable their interactions with the digital world. However, due to perspectives for a large scale deployment, wider heterogeneity and various communication technologies used, IoT poses significant novel challenges to security and privacy. In particular, it has to deal with potentially unbounded number of interacting devices and substantial differences in communication patterns, which makes state-of-the-art security mechanisms developed so far not well suitable for IoT.

We are looking for an excellent, motivated, self-driven PhD student to work in the exciting area of Internet of things (IoT) security and privacy focusing on large scale, highly dynamic and heterogeneous IoT systems and developing new, smarter, and more agile security approaches. One particular research aspect will be to investigate applicability of blockchains – distributed public ledgers underpinning cryptocurrency systems like Bitcoin -- and leveraging their advantages for autonomous computing for designing new security mechanisms for IoT that are more flexible and scalable than state-of-the art solutions.

The PhD student will join the Secure Software Systems group of the Chair of Software Engineering (https://se.informatik.uni-wuerzburg.de/home/), working on an interdisciplinary project with several industrial and academic partners. Position is available for 2 years.

The applicant is expected to have the following qualifications:

- Completed Master degree in the area of Computer Science, Software Engineering, Electrical Engineering, IT-Security, Communication Engineering (or similar subject and comparable degree)
- Outstanding rating in university degree and other qualifications
- Excellent programming skills
- Excellent English language skills (written and spoken)
- Background knowledge in at least one of the following areas: security/privacy, cryptography, distributed systems, information systems
- Strong interest in working in an interdisciplinary project with project partners from industry and academia (experience with projects related to IoT or Industry 4.0 is beneficial)
- Strong Interest in international scientific work and publications of results

Researchers will be recruited under employment contracts with full social security coverage. The University of Würzburg intends to increase the number of female faculty members and strongly encourages female candidates to apply. Candidates may apply prior to obtaining their Master degree, but cannot begin before having received it. We also welcome applications from disabled candidates, who will also be given preferential consideration over other applicants with comparable qualifications.

Applications (in English) should include the usual documents (a motivation statement, CV, certificates) and should be submitted by December 21st, 2018 per email to:

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