Announcement: Student job/internship in cooperation with Fraunhofer AISEC, Garching

Embedded System Programming for Security Experimentation

Motivation and Task Description
In the course of the German reference project for IT security in the field of Industrie 4.0 (www.iunoprojekt.de) various concepts improving IT Security have been contributed. To verify these within practical use-cases, testbeds have to be created. To meet the requirements of the industrial domain, these have to be created using embedded platforms. For evaluation of different scenarios, the planned testbeds should comprise small (e.g. STM32) as well as medium (e.g. Raspberry Pi) sized hardware footprints.

For the implementation of these testbeds, the hardware platform, the development tools, and a runnable hello-world program will be provided. The architecture of the respective testbed will be provided by a high-level description (project deliverable/paper/etc.). For the detailed specification of the implementation, there is room for own ideas and improvements as well as for discussions with the supervisors.

Requirements
- Practical experience in C/C++
- Experience working with Linux-based systems
- Experience working with embedded hardware is beneficial
- Creativity in finding own solutions to programming challenges
- Independent working attitude
- Ability to work structured – Special emphasis is on project documentation

Contact
If you are a good team player and like to work on the newest security topics together with experts, we are looking forward to your application. Please apply to all contacts listed below.

Make sure to include your CV and a current grade report in your email.

Alexander Giehl, Sven Plaga
Telefon: +49 89 322-9986-189, 117
E-Mail: alexander.giehl, sven.plaga@aisec.fraunhofer.de

Fraunhofer Research Institution for Applied and Integrated Security (AISEC)
Department Product Protection & Industrial Security
Parkring 4, 85748 Garching (near Munich), Germany
https://www.aisec.fraunhofer.de