# TECHNIK UN

We are an independent, privately owned research company in Villach, Austria which provides research services and technology based consultancy to high-tech companies across Europe.

# Connected Devices: Methodology and requirements for the creation of open-source hardware

Working Student / Master's / Bachelor's Thesis

A methodology and security requirements for the development of secure embedded devices shall be defined in cooperation with renowned European researchers.

**Interested? Write us!** 

### Background

ORSHIN – a European research project with the goal to create a "trusted life cycle" to develop and manage connected devices based on open-source hardware.

Within the frame of the thesis a methodology and security requirements for the development of secure embedded devices shall be defined in cooperation with European researchers. More specifically:

- Contribute to the development of the details of the design methodology
- Support the description how a system developer should apply the methodology to compose a secure system from secure components
- Contribute to the mapping of abstract security requirements into concrete policies for the life cycle phases
- Support the definition of concrete security requirements for device components

#### **Your Profile**

- · Profound technical knowledge and experience in terms of IoT and embedded systems
- Interest on hardware security, especially on open-source hardware
- Understanding for cryptographic protocol design over software and firmware
- Knowledge of design and evaluation of secure cryptographic circuits
- Background on firmware vulnerability analysis and formal verification
- Well-found English proficiency, capacity for teamwork as well as personal commitment and sense of responsibility

# We offer you

- You will be working for the research department of TECHNIKON and become part of the ORSHIN project team. You will be granted access to our laboratory equipment and security hardware.
- We consider a gross payment sum of EUR 7.500,00 for the thesis, assuming that the candidate is
  eligible for receiving payments either as "Werkstudent" or "Student" under the Austrian law for
  employment.

## Interested?

Contact us at **jobs@technikon.com** and send us your CV and reference letters.