Ph.D. Candidate with SAP Research Switzerland
(Project TWISNet)

PURPOSE AND OBJECTIVE

SAP Research is the technology research unit of SAP, with a network of 13 research centers worldwide. We contribute to SAP's product portfolio and extend its leading position in the market by identifying and shaping emerging IT trends and generating breakthrough technologies through **applied research**. In contrast to SAP's product groups and development labs that work on new functions and releases, SAP Research explores opportunities that haven't yet been developed into products. SAP's **Research Lab in Zurich** has been opened in 2007. It is located in proximity to the ETH Zurich, with which it cooperates closely, for example through joint PhD students.

One of the exciting projects that will be carried out at our lab in Zurich (starting 10/2010) is the EU-funded research project **TWISNet (Trustworthy Wireless Industrial Sensor Networks)**. It aims at supporting and securing the integration of **sensor networks into large scale industrial environments**, such as in the domains of **defense, public security, energy management, traffic control, and health care**. In concert with our industry partners and leading universities, the three-year project will collaboratively investigate scenarios, design and prototype software architectures interacting with sensors, and demonstrate their implementation in real-world trials, all with the goal to influence future SAP products.

EXPECTATIONS AND TASKS

For the TWISNet project we are looking for a highly motivated **PhD student to join our successful PhD program with the ETH Zurich**. Employed both by SAP Research and the ETH Zurich you will work on the TWISNet team, while in parallel pursuing a PhD with the ETH.

Your mission is to enrich TWISNet with your **innovative ideas and scenarios** for sensor network usage, to design and develop cutting-edge **prototypes**, and to **evaluate and discuss** your results with our partners from the applying industries. You should enjoy playing with the latest technologies and be able to document your ideas. Also, you should have a feeling for the business implications of your ideas.

Through the research work within the TWISNet project you have the chance to tackle interesting **scientific questions** and to use the results to influence future **SAP products** and to contribute to the research community.

QUALIFICATIONS AND SKILLS

- **Interest** in pursuing a PhD degree in a combined industrial and scientific setting
- **University degree** (Diploma or Masters) in computer science, information systems, or a closely related field with good results
- In-depth knowledge of at least one object-oriented **programming** language (e.g. Java, C++)
- A solid foundation in **computer science** with strong competencies in data structures, algorithms, and software design
- Knowledge in **sensor networks**, software security or sensor network security are a plus
- Very good capabilities to **self-organize work and manage time**; ability to work in an international team of researchers
- Fluency in **English**, verbal and written

WHAT WE OFFER

We offer you the chance to get to know a market-leading **software company**, while pursuing a PhD at a world-class university (ETH Zurich). Our team consists of highly motivated **young people** that work focused on a joint mission. **Team spirit** is one of our core values. During your PhD time there may be an opportunity to do **exchange** with another SAP Research Lab or a partner university abroad.

Contract Type:	Temporary PhD contract for 3 years
Job Location:	Zurich, Switzerland
Contact:	Dr. Felix von Reischach (felix.graf.von.reischach@sap.com)

THERE'S A PLACE FOR PEOPLE LIKE YOU

SAP