1 Post-doc position is available in the field of “Requirements Engineering for Software Evolution and Dynamic Adaptation” at FBK-ICT, *Software Engineering Research Unit* - European research project H2020-ICT.

The FBK Center for ICT focuses on key areas of Information Technology with the aim to produce added value for the market, cultural growth, and social welfare. Our research aims to push innovation through the construction of a networked system that involves companies, other research institutions, universities, public bodies, and end-users. More information about ICT is available at: [http://ict.fbk.eu/](http://ict.fbk.eu/)

**Workplace description**

The Software Engineering Research Unit (SE) aims at investigating two strategic areas of software development, for which the available technologies are largely unsatisfactory: (1) Requirements engineering; (2) Code analysis and testing. In the first area, the scientific challenges deal with the explicit representation of autonomic behaviors (e.g., those of self-adaptive systems), of the normative constraints and of requirements engineering for distributed software development. In the area of software testing, the challenge is to automate the generation of the test cases, the detection of faults, their localization in the code and the application of counter-measures.

More information about the SE Unit is available at [http://se.fbk.eu](http://se.fbk.eu)

**Job description**

The SE Research Unit, is looking for 1 candidate to carry out research activities in the field of Requirements engineering for software evolution and dynamic adaptation. **The research position is funded by the European research project SUPERSEDE (SUpporting evolution and adaptation of PERsonalized Software by Exploiting contextual Data and End-user feedback)** and are supervised by Dr. Anna Perini, who is project coordinator and FBK’s project workpackage leader. SUPERSEDE aims at providing a feedback-driven approach to the life cycle management of software services and applications, with the ultimate purpose of improving users’ quality of experience. Decisions on software evolution and runtime adaptation will be made upon the analysis of end-user feedback and of data collected by monitoring the operational context and environment at runtime

The candidate is expected to contribute original research results inside a leading edge international project. The aim of the project is to provide methods and tools to support decision-making in the evolution and adaptation of software services and applications, by exploiting end-user feedback and runtime data, with the overall goal of improving end-users’ quality of experience.

To this end, the research will explore techniques for automating the analysis of explicit user feedback, expressed in natural language, possibly enhanced by other artefacts, such as images
(multi-modal feedback). Tools for collecting user-feedback should be extended with dynamic adaptive capability. Moreover, appropriate models for decision making in software evolution and dynamic adaptation, which are able to exploit user feedback and contextual data, need to be developed together with reasoning techniques that will provide support, or automate, these decisions.

**Job requirements**

The ideal candidate should have:

- PhD degree to be completed within related to any of the following specific research areas: requirements engineering, adaptive software, software evolution, business intelligence, machine learning and information extraction
- Relevant experience in one or more of the following fields:
  - text mining
  - information extraction
  - application of decision making techniques in the context of software engineering problems
  - automated reasoning / artificial intelligence
  - adaptive software
- Good skills in: Java and C programming, web-based environments development
- Ability to work and deliver in funded research projects
- Publications in conferences and journals in the fields of software engineering, requirements engineering, adaptive software systems, software evolution, business intelligence, machine learning and information extraction
- Oral and written proficiency in English
- Capability to work in a project-oriented manner, with a strong commitment to achieve assigned objectives
- Good communication skills
- Attitude to team work in a multidisciplinary environment
- Self-efficacy, proactivity and goal orientation

**Employment:**

**Number of positions:** 1  
**Type of contract:** Collaboration contract or fixed term contract  
**Duration:** around 3 years (until April 30th 2018)  
**Start date:** between September 1st 2015 and January 1st 2016  
**Gross salary per year:** 33,300 € per year  
**Place:** Povo, Trento (Italy)  
**Interview Date:** Between July 21 and July 28. The candidate will be informed about the date of the interview two working days before
Application:

Candidates are requested to submit their application by completing the online form (https://hr.fbk.eu/en/jobs). Please make sure that your application contains the following attachment (pdf format):

- detailed CV including a list of publications
- statement of research interests (and optionally up to 3 reference letters)

Please read the Guidelines for selections before applying.

Application deadline: July 20 2015

For further information, please contact the Human Resources Service at jobs@fbk.eu