**Rubrik:**

Test Scheduling Assignment

**Organisation Plats Uppdragskategori**

RISE SICS Västerås BOMBARDIER, Ericsson Examensarbete

**Ämneskategori:** Matematik **Omfattning:** 30 hp **Ansökningsinfo:** For more information and application please contact: Sahar Tahvili, RISE SICS Västerås, [sahar.tahvili@ri.se](mailto:sahar.tahvili@ri.se) Per Enqvist KTH, [penqvist@math.kth.se](mailto:penqvist@math.kth.se)

**Sista ansökningsdatum:** 2017-11-31

The main goal of testing a product is detecting the hidden bugs in the product before we release the product to the market. For testing a software product, we need to have a set of test cases, which can be divided into main groups: manual and automated test cases.

The number of test cases that we need to test a product, depends on various parameter such as: the product size and complexity. Executing all test cases without order is not an optimal decision. To schedule test cases for execution, we need to consider the following criteria: dependencies between test cases, test case execution time and requirement coverage. In our previous works, we design and proposed a multi criteria design support system for test case selection and prioritization.

**Assignment**

In this master thesis, you need to schedule test cases for execution based on the mentioned criteria. This master thesis would be a part of an international project. Moreover, one Swedish industry (BOMBARDIER, Ericsson, ABB, etc.) will provide data for this thesis.

That is what we offer. What we expect you to know before applying is:

- Comfortable with Python or MATLAB

- Knowledge of Optimization Techniques

- Good Spoken and Written English Skills are Required

Key is an eager to learn and implement what you have learned in school. Goal is to help us to develop our decision support system.

We welcome both interns and thesis workers to apply their resume to [sahar.tahvili@ri.se](mailto:sahar.tahvili@ri.se) , [penqvist@math.kth.se](mailto:penqvist@math.kth.se)