Master Thesis in Constraint Programming

ABB Corporate Research Center in Sweden is located in Västerås, about 100 kilometers west of Stockholm. Together with our colleagues in other R&D centers we develop technologies for future products and services for ABB's core businesses.

Location: Job Function: Employment Contract Type: Apply by: Publication ID: Västerås, Vaestmanland County, Sweden Design and Engineering Diploma work, Full-Time 16.06.2013 SE53588209_E1

Tasks

Constraint Programming is a growing discipline with a vast array of applications. Many real-world applications – and implementations – emerge regularly. Challenges arise as the instances to be solved grow, and the solution-time multiplies. To solve real world problems the designer must be well versed in the inner workings of the solver engines as well as updated of current best practices.

The candidate will take place in the R&D-team and work in an ongoing project to evaluate & develop the current scheduling solution. Designing the application will include evaluating which approach to use, by investigating the state-of-the-art and best practices for the class of scheduling problems. The thesis work will be an exciting blend of academic rigor and engineering trade-offs. If possible, benchmarking to competing disciplines will be performed.

Requirements

Students in MSc programs in Electrical Engineering, Engineering Physics, and

Computer Engineering or similar are suited for this job. Candidates are expected to have a background in Constraint Programming, mathematics, some programming (preferably C++ programming) and related academic skills. It is important for applicants to be comfortable to work independently and to take initiative. It is also important that the applicant have good writing and communication skills.

Additional Information

The project will begin as soon as possible. Apply with your CV, academic transcripts and a cover letter in English. For more information, please contact research scientist Johan

Wessén at johan.wessen@se.abb.com. We look forward to receiving your application!

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