Are you interested in enterprise architecture and software development?

Background

During the last decade, Enterprise Architecture (E/A) has grown into an established approach for holistic management of the information systems in an organization. Enterprise Architecture is model based, in the sense that diagrammatic descriptions of the systems and their environment constitute the core of the approach. A number of enterprise architecture initiatives have been proposed, including The Open Group Architecture Framework (TOGAF), the Zachman Framework, Intelligrid and more. Enterprise Architecture analysis is the application of property assessment criteria on enterprise architecture models. The analysis aim to aid in information system decision making so that the Chief Information Officer (CIO) or other executive decision makers can make rational decisions based on assessment rather than on intuition as the case often is today. The CIO might for instance be interested in assessing the IT security given an enterprise architecture model that he or she is presented with. At the department of Industrial Information and Control Systems frameworks, theories, and metamodels are developed to facilitate enterprise architecture analysis.

The Master Thesis Project

This master thesis aims at developing of a tool to support the abovementioned analysis. The development involves creating support for the construction of enterprise architecture models based on the metamodel under consideration and support for collection evidence on the entities (e.g. in the case of IT security this might be critical cyber assets) and relations between these entities. From this set of evidence the tool should derive a value of the IT security.

The tool development is explorative since it aims to implement research conducted within the department and the tool will therefore be implemented iteratively. Although the core of the master thesis project is programming, it will be performed in collaboration with researchers and provide both insight in modeling and enterprise architecture assessments.

Application

Suitable applicants are students with both knowledge and interest in object oriented software development, preferably in Java. The master thesis project is performed in Stockholm and covers 20 weeks of work (30 ECTS credits) and is expected to start during spring 2008.

Supervisor: Robert Lagerström, robertl@ics.kth.se
Start date: Spring 2008
Application details: Send CV and a short description of yourself to Robert Lagerström (robertl@ics.kth.se).