IN THE NETWORKED SOCIETY
PEOPLE, KNOWLEDGE, DEVICES, AND INFORMATION ARE NETWORKED FOR THE GROWTH OF SOCIETY, LIFE AND BUSINESS.

The Networked Society is when people, business and society are using connected devices to their benefit.

Thesis - Design of Visualization Software for Radio Network Data - 00072812

Description
At Ericsson Research, we study future radio network algorithms using system simulators modeling multiple radio access technologies, like GSM, WCDMA (3G) and LTE (4G). After a study, we present the results internally and/or externally. One way of presenting the results and providing an understanding of the algorithm studied, is to develop a radio network demonstrator, which is a software application with a graphical user interface (GUI). The GUI visualizes the output data from the system simulator by means of interactive charts, maps etc.

In this thesis work, you will work with implementation of a radio network demonstrator, including both source code and graphical design of the visualization. This thesis work is carried out at Ericsson Research, which provides Ericsson with system concepts, technology and methodology, to secure long term competitive products. We drive world-class innovation through cooperation within Ericsson and with partners, customers, universities and research institutes.

The objective of this thesis is to implement a part of a radio network demonstrator, including, for instance, the following activities.
- Visualization of radio network system simulator output data.
- Graphical user interface design.
- Implementation of user interface components.
- Software performance profiling and optimization.
- Usability evaluation.

Qualifications
This project aims at Mater of Science (civilingenjör) students in computer science, computer engineering or electrical engineering. We use Java and Java FX in simulators and demonstrators and good programming skills in Java/JavaFX is required. In addition, basic knowledge in SQL is preferred.

A background in computer science, graphical design, interaction design and/or telecommunication is preferred. Applicants with less than 4.0 in average grade will not be considered.

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