Master's Thesis

in Adaptive Internet of Things (IoT) in eHealth

Norsk Regnesentral (NR) offers supervision for a master student within the ASSET (Adaptive Security for Smart Internet of Things in eHealth) project. The ASSET project is a cooperation project between NR, Høgskolen i Gjøvik (HiG), Oslo universitetssykehus (OUS) and international partners. The project is financed by the Norges forskningsråd and will run from January 2012 to July 2015. The candidate is required to register in either GUC's Information Security master's program or Department of Informatics, University of Oslo.

The Master's thesis consists of a practical and theoretical work. The practical work includes setting up a development lab and simulation testbed for network of Things for medical care with associated software and simulation tools for performance analysis and proof-of-concept. Things include smart phones, sensors, sensor nodes and actuator nodes. The theoretical work includes the analysis and design of adaptive strategies for the dynamic interplay between security and data transmission in the setup mobile patient monitoring system that is capable of self-organizing the communications among nodes. This will include a collection of procedures for network creation including network discovery, network access, topology learning, traffic determination, routing, and different quality of service (QoS) metrics.

Further information

For further information, please consult the following web pages:

The ASSET project: http://asset.nr.no/

Norsk Regnesentral (NR), Department of Applied Research in ICT:
http://www.nr.no/pages/dart/about_dart

Contact persons

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