

Health Informatics

Health Informatics covers a large number of research areas and methods including, data and text mining, language technology, modelling, simulation and information access for systems within the health care sector. The aim of our research is to improve health care by meeting the needs for IT systems at various levels, from county councils and hospitals to small mobile units for the elderly and nursing homes, and to support researchers in health care, medicine and pharmaceutical research by providing tools and techniques to support decision making. Some examples include advanced medical decision support for risk assessment, and simulated environments for rehabilitation of violent offenders.



Better IT for better health care

Health informatics covers a large number of research areas. Around thirty researchers at DSV work within the field. Many of the research projects are carried out as a partnership between organisations and industry. Research within health care analytics and modelling is applied to real-life problems and results are brought back to the university to research and teaching.

Text mining for better health

In collaboration with Karolinska University Hospital over one million patient records containing both structured information and unstructured information have been analysed automatically.

High-performance data mining for drug effect detection

The research contributes with novel approaches to data mining and clinical text mining and platforms for large-scale analysis of massive, heterogeneous and continuously growing data sets. Creating interoperability of nordic cancer biobanks using data- and text mining.

Mobility for better health

We are studying how “open social services” should be formulated and introduced. We are also studying how professional user group adopts mobile and handheld technology.

Health communities

We study ways of designing and using e-health communities for communication and learning in groups.

Information access for better health

We have developed information access tools to improve the quality of the search results, and also by automatically translating the search query to other languages, cross lingual information access.

Visualisation of business models within medical care

A business model can graphically describe the actors that are working together, the values that are being generated for the patient and the way in which the medical and general care is financed and managed.

Simulation in health

We perform R & D on simulated environments for treatment, rehabilitation and diagnostics. We are studying e.g. the effects of simulation for clinical use in psychiatry, domestic violence and other areas.

Contacts

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Please consult the weblink for contact information.

Ongoing projects

De-puzzling Time: Improving information access from Swedish medical records by modeling temporal expressions

HIPPA-Hospital Intelligence for better patient security

Nordic Center of Excellence-The Nordic Information for Action eScience Center

Automated translation of radiology reports into general Swedish

Detect-HAI - Detection of Hospital Acquired Infections through language technology analysis of electronic patient records.

High-Performance Data Mining for Drug Effect Detection

Interlock: Stockholm - San Diego - Inter-Language collaboration in clinical NLP

Open Social Cloud Services

Virtual Cases for Diagnostics and Treatment in Forensic psychiatry

Virtual Cases for Rehabilitation of men sentenced for domestic violence

Web-based stress management using a holistic approach