Search User Interfaces

The user interface is the space where interactions between humans and information systems occur. The goal of this interaction is effective operation and control of a system on the user’s end, and feedback from the respective computers within an information system, which aids the operator in making operational decisions. Next to computer science and information systems, the design considerations applicable when creating user interfaces are related to or involve such disciplines as ergonomics and psychology.

Generally, the goal of human-computer interaction engineering is to produce a user interface which makes it easy, efficient, and enjoyable to operate a system in the way which produces the desired result. Search user interfaces are special graphical user interfaces (GUIs) for finding corresponding information. Challenges thereby are: how to design and evaluate such search user interfaces; determining what model of information seeking process is used; etc.

Post has been engaged in eHealth for many years and had set up an electronic patient record for the Canton Geneva. This platform “vivates” is implemented in many cantons so far. Experience shows that the user interface of such an electronic health record must be easy and simple to use and adapted to the user needs. Indeed, the average user is generally not tech-savvy, uses the system infrequently and the user interface therefore must be efficient.

The goal of this Master thesis is to analyze personalized views in search user interfaces. In collaboration with Swiss Post, self-adapting search user interfaces for an e-Health platform should be designed and validated. In doing so, based on literature and Web reviews, wireframes should be developed and evaluated. How could personalized views (e.g. of health professionals as medical doctors, nurses, or patients, health managers, etc.) look like? How could these views be changed/altered depending on the context and behavior (e.g. location, time, previous actions, patient pathologies, etc.) of the person?
In consultation with the advisor, this topic will be specified more precisely. In the end, it would be neat to publish a summary of this work as a research paper. For more information and sources, please contact Edy Portmann.

**Type:** I/K/L/P/O  
**Language:** English (or German)  
**Start:** upon agreement  
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