

Keynote Presentation

Towards International Privacy-preserving Benchmarks of eHealth Technologies

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1 Bio

Senior Researcher, PhD Hanna Suominen is an experienced researcher, coordinator and teacher on health and wellness technologies. Her research interests are developing and evaluating methods and applications of machine learning, mathematical modeling, and human language technologies. Hanna has contributed to numerous successful projects with research, industry, governmental, and educational partners in Australia and Europe and her collaborative research has led to real-life applications for health and wellness. She has scored twice within the top teams in international medical language processing challenges. She has nearly 40 scientific, peer-reviewed publications, two best paper awarded contributions, and a Venture Cup 2007-2008 award. She has won several collaborative and personal research and commercialization grants. Her doctoral dissertation on machine learning and clinical text was approved with honors of belonging to the ten per cent elite of the field internationally.

2 Abstract

Capabilities to share, integrate, and compare eHealth data, clinical trial results, and other evaluation outcomes together with eHealth applications are critical to accelerate discovery and its diffusion to clinical practice. However, the same ethical and legal frameworks that protect privacy hinder this open data and open-source code approach, and the issues accumulate if moving data across national, territorial, regional or organizational borders. This can be seen as one of the reasons why many eHealth applications and health-research findings tend to be limited to very narrow domains and global solutions and results are lacking. Our objective is to take steps towards establishing an international electronic repository and virtual laboratory of open data and open-source code for research purposes. In this talk, we compare how using and disclosing personal data for research purposes is addressed in international, Austrian, Australian, Finnish, Swizz, and US ethical and legal frameworks. We also summarize the lessons learnt from the recent privacy workshops (IDASH Privacy Workshop 2011 in the USA and iappANZ 2011 Privacy Summit in Australia) and challenges (TREC Medical Records Track 2011 and Heritage Health Prize).