The International Health Data Workshop
(HEDA 2021)
in conjunction with
10th International Conference on Model and Data Engineering (MEDI 2021)
*** 21-23 June 2021, Tallinn, Estonia ***

Conference website: https://cs.ttu.ee/events/medi2021/

Objectives and topics

Health data covers a brought range of data influencing people's health monitoring, analysing, and predicting. In general, it includes all such data such as environmental data, individual data gathered, for example, via fitness trackers and especially clinical data.

The routine clinical data are considered precious[1], and their secondary use[2] is considered beneficial for policymakers, public health officers, scientists, clinicians, citizens and industry[3]. Different initiatives, including European Health Data Network[4] and Clinical Trial Data[5] initiative, initiated by the European Commission and the EFPIA (European Federation of Pharmaceutical Industries and Associations), are searching for better solutions for utilising citizens' health data. However, as stated in[6], due to the semantic heterogeneity of health data, we still do not have a unified approach and use divide-and-conquer approaches instead. The review[7] conducted a year later, concludes that no big-data analytics will happen without optimised data sharing and reuse, what we still lack despite different interoperability standards in the medical domain.

HEDA 2021 aims to bring together academics, practitioners and other interested attendees for presentations, and discussions in the domain of health data modelling, interoperability, and analytics. The aim is to create a broader community to explore the potential for open secondary use and analytics of citizens' health data and develop and evaluate the solutions to make it happen. We emphasise here the central role of citizens, as data holders, whose privacy, active consent and control must be ensured when processing the health data in a global context.

HEDA 2021 invites paper submission, including position and work-in-progress papers, about unpublished research covering all aspects of health data modelling, interoperability and analytics.

Relevant topics for the workshop (but not limited to) are the following:

- Health data models and meta-models
- Widespread Usage of Health data
- Anonymisation and privacy of health data
- Health data integrity and quality
- Open health data platforms
- Services for data retrieval, data exchange, data analysis (Data analytics as a service)

- The architecture of eHealth systems
- Syntactical operability
- Semantic operability
- Device-to-Device Communication
- Data from social media, fitness trackers
- Combining data sources

Submission

Workshop papers will be published by Springer in "Communications in Computer and Information Science" (CCIS). Best papers from all accepted workshops will be selected for a special issue.

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EacyChair.

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[1] T.D.Wade, Refining gold from existing data, Curr Opin Allergy Clin Immunol, 2014; 14(3): 181-185

[2] PricewaterhouseCoopers, 2009, Transforming healthcare through secondary use of health data.

[3] W.O.Hackle and E.Ammenwerth, SPIRIT; systematic panning of intelligent reuse of integrated clinical routine data – a conceptual best-practice framework and procedure model, Methods of information in medicine, vol 55, no 02, pp.114-124.

[4] IMI (Innovative Medicines Initiative), 2017, 12th Call for Proposals, document reference IMI2/INT/2017-02169

[5] IMI (Innovative Medicines Initiative), https://www.imi.europa.eu/sites/default/files/uploads/documents/apply-for-funding/future-topics/DraftTopic_ReturningTrialData_v6April.pdf, Future topics of 23th Call, 2020

[6] B.Shickel, P.J.Tighe, A.Bihorac, and P.Rashidi; Deep EHR: A Survey of Recent Advances in Deep Learning Techniques for Electronic Health Record (EHR) Analysis, 2018, IEEE Journal of Biomedical and Health Informatics, vol 22, no 5, pp 1589-1604

[7] X, Gansel, M. Mary, and A. van Belkum; Semantic data interoperability, digital medicine, and e-health in infectious disease management: a review; 2019, European Journal for Clinical Microbiology and Infectious Diseases, 38: 1023-1034

Authors are invited to submit original previously unpublished research papers written in English and must be between 10 to 14 pages for long papers and 6 to 8 pages for short papers, strictly following the CCIS format guidelines. Authors can download the Latex (recommended) or Word templates available at Springer's web site.

Important dates

- Submission of workshop proposals: March 30, 2021
- Workshop acceptance/rejection notification: April 9, 2021
- Camera-ready: June 9, 2021
- Workshops: June 21-22, 2021

Workshop Organisers and Program Committee

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