The 5th International Workshop on Health Recommender Systems

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Preface

Digital health has provided more access to affordable health care, self-care, and quantified self. The COVID-19 pandemic in 2020 caused pervasive health-related measures, and health-oriented services, systems, and solutions have grown more than ever as a result. Therefore, individuals and clinicians are faced with a vast amount of health data and limited time for decision making. Recommender systems can improve digital health by supporting experts and individuals to lower the burden of choice overload and further to automate various processes in the health domain. The Health Recommender Systems (HRS) workshop is discussing multiple fields in which recommender systems can improve well-being, health, and self-awareness. The use of recommender systems in the health domain gives a new perspective to current discussions and challenges of recommender systems, including how to involve users in the recommendation process, as well as the need to account for crucial aspects of trust and privacy.

Following the four previous workshops, the focus of this workshop is to intensify the discussion on health promotion, health care, as well as health-related methods. This workshop also aims at strengthening the HealthRecSys community, at engaging representatives of other health domains into cross-domain collaborations, and at exchanging and sharing infrastructure. This volume contains the papers presented at the 5th international workshop on health recommender systems on September 26, 2020, held as part of the 14th ACM Conference on Recommender Systems. After a peer-review process with at least three reviewers per paper, six papers with the highest quality were accepted for presentation in the workshop.

The 2020 submission topics covered various goals, data types, algorithms, and subdomains of health. One part of the submissions focuses on systems for lifestyle and well-being, including nutrition, physical activity, sleep, mental health promotion, and care. The other part of the submissions is targeting the medical domain in areas of clinical decision support, personalized diagnostics and treatment, COVID19, electronic health records, and patients monitoring. HealthRecSys2020 contributions consider user-in-the-loop interfaces, active monitoring, context-awareness, personalization, user engagement, and behavior change. Reinforcement learning, neural networks, causal framework, dialog agents, ontologies, data mining, and recommender systems are among the frequently mentioned method-related keywords. The HRS chairs would like to thank the RecSys 2020 organizing committee, especially the RecSys workshop chairs for their support. We would also like to thank the authors, presenters, and PC members, whose efforts made the workshop possible.

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