DigiHealthDay™ Premeeting Workshop: AI and Big Data Analytics in Healthcare

June 29, Tuesday, 2021, 9:45-13:00 (CEST)

ABSTRACT

Foundations, Opportunities and Challenges

Artificial intelligence (AI) is the next phase of the industrial revolution. It aims to automate human or manual decision making. AI has started to disrupt nearly every industry, including healthcare. However, we have just started to scratch the surface as there are many more AI opportunities for healthcare that will allow to improve patient care while cutting waiting times and costs. In this talk, we will introduce AI and its applications in healthcare. We then examine possible future opportunities of how AI could skyrocket healthcare. Next, we will look at the challenges in and around AI research, the impact of AI on our society, fears, education, and the need for data literacy for everyone, including physicians and patients. We will also discuss how these challenges could be solved.

Landscape of Healthcare Recommender Systems

Predictive Data Analytics is featured by Recommender Systems. Recommender system is to help users find relevant products that may interest them. Over the last decade, recommender systems have been widely developed in many real-world applications such as book recommendations in Amazon, movie recommendations in Netflix, friend recommendations in Facebook, and video recommendations in YouTube. In this talk, I will discuss the state-of-the-art research in Healthcare Recommender Systems, which includes rationale and algorithms behind the recommender black box in healthcare, important features and evaluations in recommender systems. Afterwards, I will demonstrate a real-world health-aware food recommender system project. This talk will be concluded by discussing the emerging research streams in healthcare recommender systems and possible interdisciplinary research for data analytics in healthcare domain.