

AI and Machine Learning for Decision Support in Health – where we are and where we are going

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Abstract

Decision Support Systems (DSSs) in health aim to help healthcare professionals (or patients) in making more efficient decisions. Their task may be to help, e.g., with early diagnosis of a disease, creation of treatment plans, or making lifestyle changes. Recent advances in data-driven approaches such as AI and machine learning methods, combined with the increased availability of data, have pushed this field forward. However, the speed of uptake of such methods in routine clinical use is much slower than what we are used to e.g. in industrial or financial applications.

In this talk, we will go through several issues that we run into when developing machine learning approaches specifically for real-life healthcare settings. We will look at current success stories, and especially challenges that remain to be solved. We will look at several realized examples. What went well, what could be improved, and what can we learn from that?