

Title:

Online learning in digital Markets

Abstract:

Online learning is concerned with the study of algorithms that learn sequentially through repeated interactions with an unknown environment. The goal is to understand how fast an agent can learn based on the information received from the environment. Digital markets, with their complex ecosystems of algorithmic agents, provide countless examples of sequential decision-making problems with different decision spaces, utility functions, and types of learning feedback. In the talk, we will show how solving problems arising from digital markets has improved our understanding of what machine learning algorithms can do.