

Abstract zum Vortrag:

In this talk, I will first revisit theoretical option pricing models quickly. Next, I will present some data-driven approaches for option price prediction whose derivation is based on the no-arbitrage theory of option pricing. The scope and limitations of ML models using the homogeneity hint will be explained. Finally, we derive a common representation space for achieving domain adaptation using the theoretical treatment. The success of implementing this idea is shown using real data. Then we report several experimental results for critically examining the performance of the derived pricing models. The talk is based on two papers I coauthored with my past students, Atharva Tanksale, Sharan Rajani, and Nimit Rana.