



THE UNIVERSITY OF
CHICAGO

Department of Statistics

MASTER'S THESIS PRESENTATION

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Optimizing MLB's Batter-Pitcher Matchup through a Representation
Learning Approach

TUESDAY, April 21, 2020, at 3:00 PM
ZOOM Meeting, 5747 S. Ellis Avenue

ABSTRACT

Optimizing the batter-pitcher matchup is one of modern baseball's focuses. Instead of having a fixed lineup throughout the season, teams change their lineups on a daily basis to have a better matchup. However, current statistics like batting average or slugging percentage provide little insight into this goal due to the lack of past head-to-head records. In this paper, an algorithm that utilizes representation learning is proposed to tackle this problem.