

## INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

## Icely -Data-Driven Performance Evaluation and Player Ranking in Hockey via a Machine Learning

A dissertation by

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## Abstract

Due to the availability of vast data documenting all of the events occurring during a match, the challenge of evaluating the performance of hockey players is garnering the attention of numerous corporations and the scientific community (e.g., tackles, passes, shots, etc.). Regrettably, there is no one, commonly acknowledged criterion for assessing performance quality in all of its forms. develop and implement Player Rank in this paper, a data-driven system that provides a principled multi-dimensional and role-aware evaluation of hockey players' performance.

While choosing talents on the entire space of hockey players, it cannot be guessed by humans, because too much time consuming, Data-Driven performances can help choose one The smallest part of the best The player meets the specific constraints or displays a model in Performance allows scouting and club analysis a larger set, Therefore, players save a lot of time and significant economic resources While expanding reconnaissance activities and career opportunities to talented players.