

# The Hong Kong University of Science and Technology Department of Mathematics

## MPhil THESIS EXAMINATION

## Application of machine learning in the football transfer market

By

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#### <u>ABSTRACT</u>

Nowadays, the ever-increasing competitiveness of professional football and its economic significance have prompted managers to focus on the transfer market. This is followed by an increase in the availability of information about player ability labels and transfer market value. However, there does not seem to be an appropriate standard for the value of players. Some players are valued for their outstanding performance, other players are valued for their great potential. We use machine learning methods to determine the weight of the player's ability to build models. Through the best model, it can be concluded that the players' overall score, potential score and age have the greatest influence on their value. Then based on the model, we predict the value of young players in 6 months, which will help the club buy young players with room for appreciation.

Date: 8 June 2021, Tuesday

Time: 2:00 p.m.\*\*

Venue: Online via Zoom

https://hkust.zoom.com.us/j/3311873291

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#### Thesis Examination Committee

Chairman : Prof. Yang XIANG, MATH /HKUST

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(Open to all faculty and students)

The student's thesis is now being displayed on the reception counter in the General Administration Office (Room 3461).