Problem Chosen

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2020 MCM/ICM Summary Sheet

Team Control Number

2002134

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Summary

Keywords:

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February 15, 2020

Contents

1 Introduction

1.1 Problem Background

Football is one of the most well-known sports activities in the world. The standard system of an 11-man football game is one goalkeeper and 10 players from each of the two teams. There are a total of 22 players who fight, defend and attack on the rectangular grass court. The game scores by shooting the ball into the opponent's goal. When the game is over, the team with the most points wins.

As we all know, football is a sport that requires intense teamwork. For it can show the importance of teamwork spirit more than superb personal ability. Passing, as an offensive means that requires the cooperation of various players to play the biggest role, is just an important manifestation of the team spirit of football. Therefore, to study the important role of teamwork in football, you can start by studying the passing network in football.

Our goal is to simulate the Huskies' passing network and conduct research by building a network model. On this basis, we analyzed the teamwork level of the Huskies players and offered suggestions for its future formation strategy. Finally, we also provided some opinions on how to improve the team spirit of the general team.

Appendices