

Probability and Statistics

Game Intelligence in Team Sports

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We set up a game theoretic framework to analyze a wide range of situations from team sports. A fundamental idea is the concept of potential; the probability of the offense scoring the next goal minus the probability that the next goal is made by the defense. We develop categorical as well as continuous models, and obtain optimal strategies for both offense and defense. A main result is that the optimal defensive strategy is to minimize the maximum potential of all offensive strategies.

This is joint work with Jan Lennartsson and Nicklas Lidström.