# Prevent Long Kick Pass
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Motive

If an opponent kick the ball to a space without our robots, they cannot prevent an opponent to kick the ball to our goal post. So we want to expect passed opponents. If we can do it, our robots keep the positions that is near passed opponents and an opponent cannot score our goal post by long-kicking.

How do we share the informations of opponents?

1. Sort opponents as update time in ascending order
2. Check sorted opponents from head in order.
   − If our robots find the opponent, adding its positions to Say Message and updating update time.
   − Otherwise, not adding that.
3. If number of added positions reaches a limit, it close this process. Otherwise, continue 2.

How do we predict passed opponents?

Consider the distance between an opponent and the ball as A_i. Consider a standard distance as B. The more smaller $|A_i - B|$ will be decided as passed opponent.
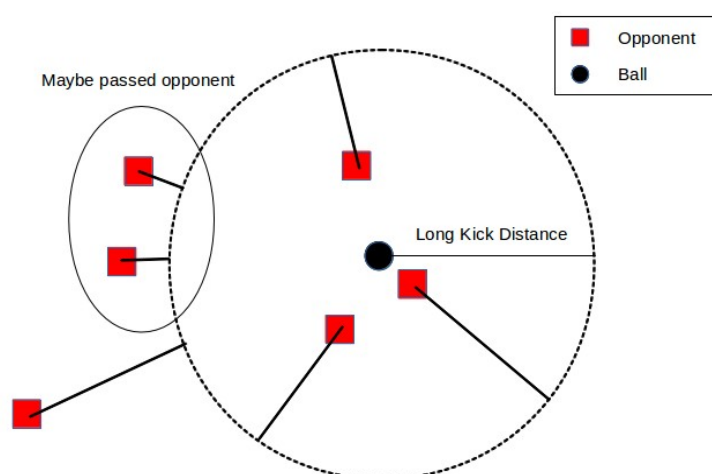
When should they move to positions near passed opponents?

The difference between nearest opponent from ball and nearest friend from ball is considered as the evaluated value. If its value is lower, it is higher possible to kick the ball by an opponent because the friend is far from the ball and the opponent is near the ball.