

A Table Soccer Game Recorder

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June 11, 2008

Our table soccer robot can already challenge even professional human players. Next, the robot should play games by using human-like skills. As a foundation of this research, our table soccer game recorder can save and replay games played by humans. This video shows the construction and functionality of the recording system.

We use three types of sensors mounted on a regular game table. The movement of a game rod is measured by an optical distance sensor. Its turning is observed by a magnetic rotary encoder. Two laser measurement systems are synchronized to determine the position of the ball. The raw sensor data is smoothed by an approach using multi-model Kalman filter. We developed several software modules for the system. The modules provide a basis for the future research.