



BIRILLO BOYS

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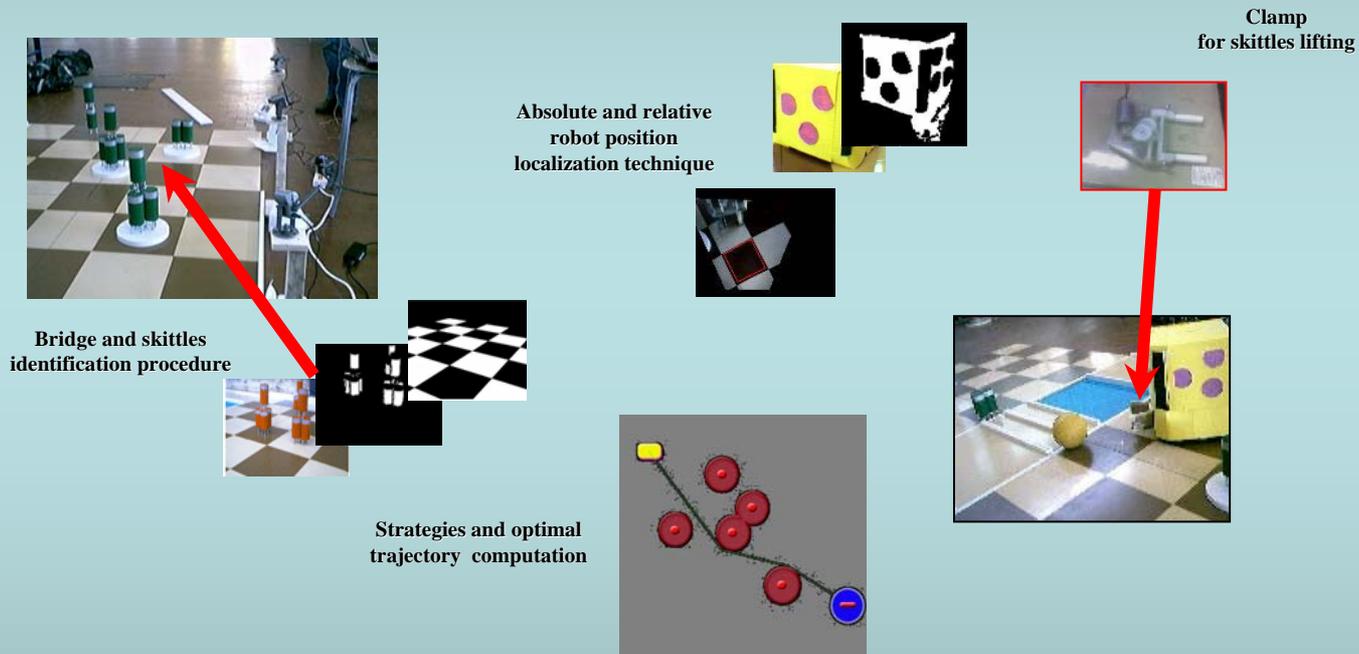
•Introduction

Eurobot Pisa Group are ten students of Automation Engineering in Pisa that during robotics lessons shown great interest on issues about robot control. Eurobot 2005 is the right event to apply what they studied and what they haven't yet. Our project has been supported by the Interdepartmental Research Center "E. Piaggio" that provided all the technical and logistic help to face the challenge.



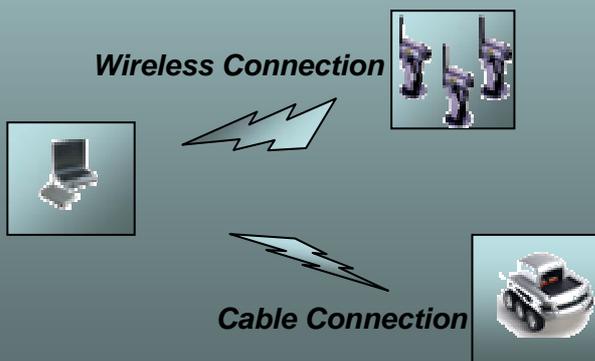
•Software

The vision source code developed for our application is able to distinguish castles of skittles to pull down and recognize the bridge to cross using informations provided by external wireless webcam; it can also provide the absolute position of our robot on the battle field. The images captured by on-board webcams, once elaborated, provide informations useful either to close position control loop or to select the right skittle to raise.



•Hardware

Hardware equipment comprises a notebook used as central elaboration unit, 3 wireless external webcams that characterize standing skittles and absolute position of our robot, 2 on-board wired webcams to implement the pulled down skittles raising task. Last but not least, the heart of our project, an unicycle produced by K-Team that we friendly call "Attila".



•Referece

Further informations on our web site