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(57) Abstract :  
integration of robotics, artificial intelligence, and sports, offering enthusiasts a dynamic platform for engaging in challenging and entertaining soccer matches. This patent protects the unique configuration and operation of the Robo-Soccer system, which combines innovative hardware and software components to facilitate autonomous gameplay. Key components include the Arduino Uno microcontroller, Motor Shield for precise movement control, and HC-05 Bluetooth Module for enhanced functionality and user experience, with a communication range exceeding 100 meters. The system encourages STEM education, innovation, collaboration, and competition, making significant contributions to the advancement of robotics and technology. participants with an immersive experience in the field of robotics and sports. The system incorporates cutting-edge hardware and software components to enable autonomous robots to compete in soccer matches with agility, strategy, and teamwork.

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