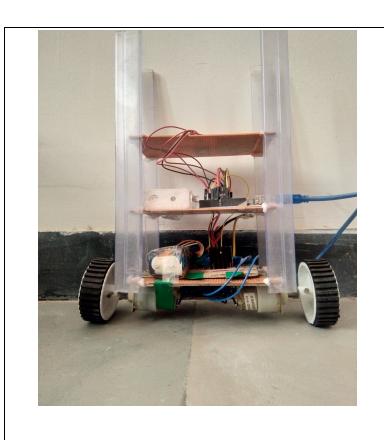


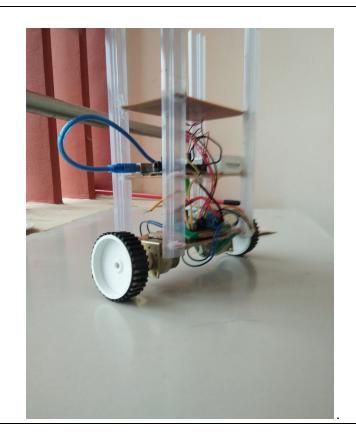
7TH INTER IIT TECH MEET 2018 IIT BOMBAY



Self Balancing Bot

Raktim Gautam Goswami and Abhishek Bairagi







About

Our project is a two-wheeled self-balancing bot.

While doing summer projects we got an idea of making a self-balancing bot.

We were a team of two.

We used DC motors, arduino Uno , Lipo battery and MPU6050(gyroscope +accelerometer) for making this.

It balances itself on the basis of readings from MPU6050.

Basic Mechanism is - To keep the robot balanced, the motors must counteract the falling robot. This action requires feedback and correcting elements. The feedback element is the MPU6050 gyroscope + accelerometer, which gives both acceleration and rotation in all three axes. The Arduino uses this to know the current orientation of the robot. The correcting element is the motor and wheel combination.

Impact

1)It was exhibited in Makers Fair Hyderabad.

Contact

Raktim Gautam Goswami , Contact - 7002518607 , <u>EE17BTECH11051@iith.ac.in</u>

Abhishek Bairagi, Contact- 7089079662 , <u>EE17BTECH11004@iith.ac.in</u>

Btech Students, Department of Electrical Engineering IIT Hyderabad

