

Basic Hands-On Workshop

The basic idea of a hands-on workshop is to actively participate in groups and to put on your thinking caps and innovate something new. We the IEEE Robotics and Automation Society (RAS) ASE Bengaluru chapter in association with ACROM(Amrita Club for Robotics and Mechatronics) put together a hands-on workshop on the 9th and 10th of September 2017.

A total of 85 teams registered for the event, which broke our previous record of 83.

On the first day, our team taught the students about the basic methodologies and the working of Arduino. The basic equipment and accessories needed for making bots were also discussed. This helped the students increase their knowledge in some of the fundamentals of robotics and paved a way to the learning of Arduino and its uses in the real world.

On the Second day, the students learned to interface the Arduino with different sensors and modules. They learned a few Arduino applications practically.

The following are the three Arduino applications the students had learned.

- Line Follower (LIFO) – Interfacing the Arduino with infrared sensors and code in such a way that the robot follows the black line.
- Edge Detector- Using infrared sensors, sensing the edges and then avoiding them by making the bot move in a different direction using Arduino.
- Bluetooth Module- Interfacing the Arduino with a Bluetooth module, to control the robot's motion externally.

By the end of the 2 days, the students were ready to showcase their bots to their friends, families as we had given a kit to them. Overall we had an amazing experience and hope to continue bringing out more workshops like this for those who are interested



