

Department of Electronics & Communication Engineering

18.03.2021

Submitted,

Sub: Report on Two Days Workshop on "Microduino" during 16^{th} - 17^{th} March2021 for ECE Students – Reg.

With respect to the above subject, We Department of Electronics & Communication Engineering organized Two Days Workshop **on "Microduino"** for students of first year 16^{th} & 17^{th} March 2021 in the campus. The Workshop provided an interactive atmosphere between the resource persons and the participants. The objective of the Program is to enhance the programming skills in the embedded system design for the students to expose their knowledge to do prototype innovative projects with "Arduino" Technology. Arduino is a special controller to build a Robot to perform the tasks.

The program inaugurated on 16th March 2021 with invocation song and lighting of lamp by all dignitaries, our beloved Principal Dr.B. Shadaksharappa, Prof.C. Sivaprakash HOD /ECE, Dr. Prabhakar T.N and the Chief of Guest Sri.K Uday Bhargav.

Prof.C. Sivaprakash, Head of the department, Electronics & Communication Engineering welcomed the Chief Guest and the gathering. Our beloved Principal, Dr. B. Shadaksharappa delivered the presidential address, in his address he motivated the students to enhance the Robotic skills. Chief Guest Sri. K Uday Bhargav briefed about the current technology like Embedded System, Artificial Intelligence and Machine Learning. The inaugural session ended with vote of thanks by Dr.T.N Prabhakar, ECE, SSCE.

The session started with "Introduction to Robots and Robotics "and "Introduction to Arduino and its IDE"; Simple applications of Arduino on LED and its coding. Participants got familiar with various development boards of Arduino and learnt the development environment for Arduino. Working with Arduino I/ O pin was taught and functions of various embedded components were explained. Later simple application of Arduino like blinking LED and its coding was explained. The example comprised of "Binary code system" and "Traffic light Signals" using LED and Arduino coding along with IR sensor.

The session was followed by , assembling of Line follower Robot along with Obstacle Detector Robot with code and explanation explanation given about the wiring of motor drivers L293D to Arduino and motors of RC car chassis. All the doubts of students were



Department of Electronics & Communication Engineering cleared by on the spot questioning and answering. In the end the RC car got finished wiring and coding in Arduino. Then the operation of this RC car was done in front of students and it worked really well. All the students were amazed by looking at the way this RC car was being controlled.

Participants had to build a mini project from what they learnt from the day 1. The time had given to complete the project was 2 hours. Most of Participants completed the project in 1 hour and 30 minutes, which was a good opportunity for them to explore in Arduino. And at the end of 2 hours participants were able to build a mini project with the things that Participants learnt from day 1. Sessions were so interactive and participants doubts were clarified in that occasion. The speaker expressed how the students can improve & upgrade knowledge in the field of embedded technology, which helps in getting placed in core companies.

The **valedictory function** was held at Sri Leo Muthu Innovation Center – Embedded Domain on 17thMarch 2021 between 3.30 pm to 4.00 pm. The function was presided over by Principal Dr.B. Shadaksharappa and Prof. C. Sivaprakash, Head of Department ECE and Resource person Sri.K Uday Bhargav, Director, GenEd Technologies, Bangalore. Students shared their view about workshop followed by the trainer's feedback. Participation certificate was distributed to all participants and workshop was ended with a group photo. The student's feedback about the workshop was very good and expect similar workshop in the near future.

Coordinator

Head of the Department



Department of Electronics & Communication Engineering

















Department of Electronics & Communication Engineering





