



Report

Phase Shift 2021

Department of Electronics and Telecommunication Engineering

Faculty Co-ordinator -

- **Dr. Balachandra K**

Student Co-ordinator-

- **Vidyashree V**
- **Abhinav Dhamne**

(26TH NOVEMBER, 2021)

ARDUINO WORKSHOP REPORT

DEPARTMENT- ELECTRONICS AND TELECOMMUNICATION



Introduction

The Department of Electronics and Telecommunications presented a Workshop on Arduino. It was an opportunity for participants to get Hands-on experience working with Arduino and various sensors. It was held on the 26th of November at 11 am in classroom 604, 6th floor, Platinum Jubilee Building. Registration fees were 400/- (including kits). The winners were awarded a cash price of 1200/- and internship opportunities, The first runner-ups were awarded a cash price of 800/- and internship opportunities, The second runner-ups were also awarded internship opportunities (All internship opportunities were awarded by the



resource person) . Each team consisted of 2-4 members. Event coordinators were Ananya Srinivas and Sai Bhavana.

The resource person of the workshop was Mr. Kritesh, Entrepreneur, Founder of The Engineer Store. He is an alumnus of BMS College of Engineering and has conducted various workshops in our college before.

The workshop was conducted in two parts. Firstly the resource person gave a seminar on Arduino and its applications for two hours, then the students were given a chance to create their own circuit with the kits that were provided to them. A total of eleven teams (35 participants) participated. In the end, all the teams were judged based on their model and model description, and 3 teams were chosen to be the winners.

Learning Outcomes

1. The session gave project ideas and market knowledge of Arduino.
2. Students developed a disciplined engineering approach and sound practical skills in using Arduino.

Review from the winning team: "It was a wonderful workshop. Very grateful to all the event coordinators and the rest for organizing such a gem of an event. It was one of the few workshops I truly enjoyed, learned, and sat throughout its entire duration. I'm really proud of myself and my team. Hope to see a lot more like this in the future. THANK YOU".

Industry Connect:

Internship Opportunities were provided to the below-mentioned Teams.

Names of winners:

1. Dhvani Sanjai - BMSCE - Medical Electronics
2. Apoorva M S - BMSCE - Medical Electronics



3. Ashwathi S - BMSCE - Medical Electronics
4. Abhinav Rajkumar - BMSCE - Medical Electronics

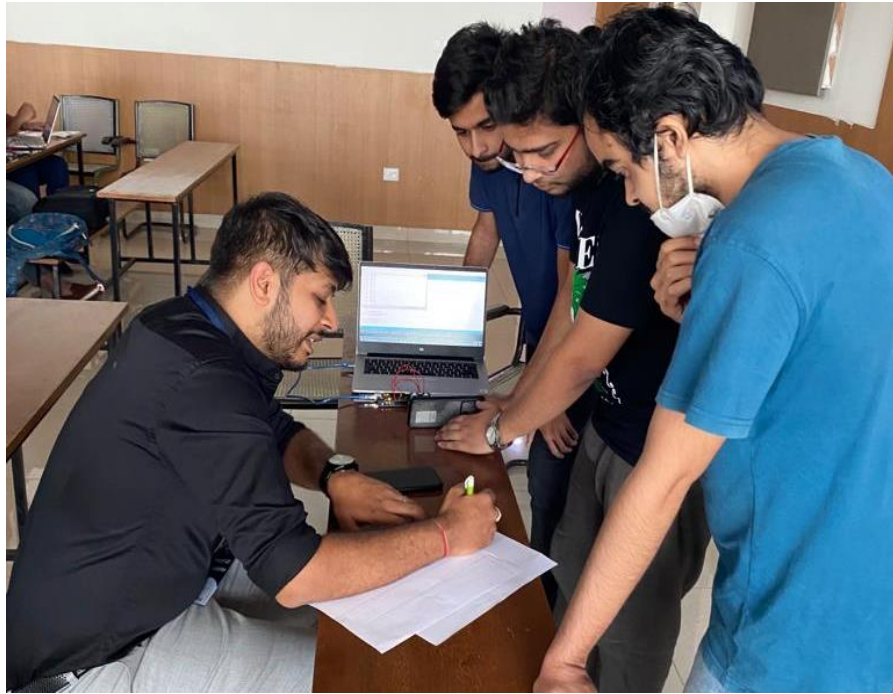
Names of First runner-ups:

1. Manas Upadhyaya - BMSCE - Electronics and Telecommunications
2. Lakshmi Priya G S - BMSCE - Electronics and Telecommunications
3. Pallavi U Sharma - BMSCE - Electronics and Telecommunications
4. Suprita Anand - BMSCE - Electronics and Telecommunications

Names of Second runner-ups:

1. Chinmayi R Bhatt - BMSCE - Medical Electronics
2. Vani S Ramchandran - BMSCE - Medical Electronics
3. Lekha M - BMSCE - Medical Electronics
4. Rohit Raj - BMSCE - Medical Electronics

Mr. Kritesh, Entrepreneur, Founder of The Engineer Store offered the internship opportunities.





(26TH NOVEMBER, 2021)

IoT WORKSHOP REPORT

DEPARTMENT- ELECTRONICS AND TELECOMMUNICATION



Introduction:

Over the past few years, IoT has become one of the most important technologies of the 21st century. Now that we can connect everyday objects—kitchen appliances, cars, thermostats, baby monitors—to the internet via embedded devices, seamless communication is possible between people, processes, and things.

The workshop on IOT was arranged by the Department of Electronics and Telecommunications. In **Phaseshift 2021**, on 26th November from 11 a.m. to 4 p.m. The session was handled by Rahul MK and Vinayak Raju, the alumni of BMSCE, working at Cisco and Finastra respectively. Students in a team of 2- 4 members, 22 teams were registered across all colleges in Bangalore, around 67 students took part in the workshop.

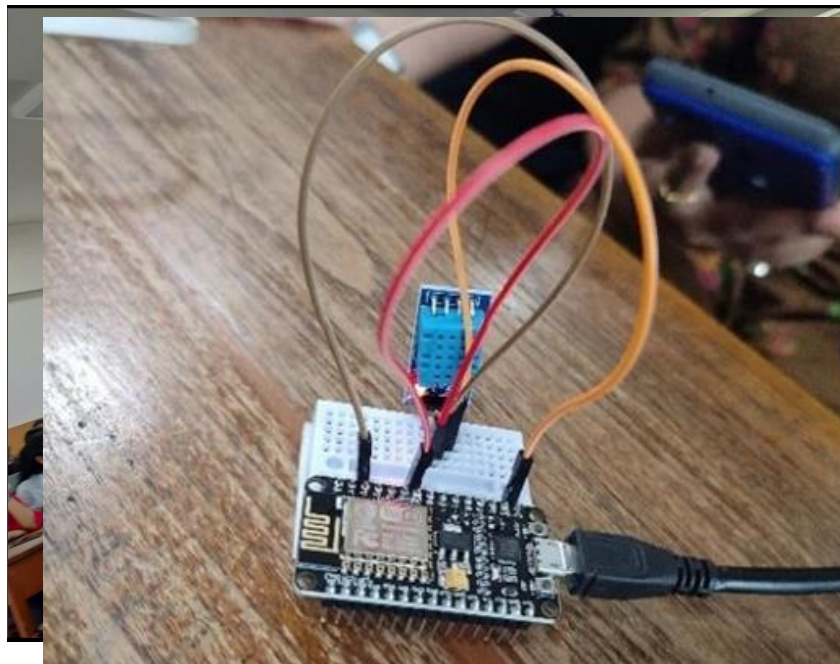
The session started with a brief introduction to the **“Internet of things”**. And then students were given an IOT kit which included ESP32 Node MCU, temperature humidity sensors along other components. Students were ready with all their pre-requisites (downloading and installation of the software). Initially, they guided students about the basic functions of Arduino IDE, sensors, and taught them to how to add libraries from ARDUINO_LIBRARIES, and gave some basic knowledge about connections, and IOT applications in daily life.

Learning Outcomes

- ❖ The students were assigned to do two projects (Project 1-IOT Weather Station, Project 2- IOT Home automation).
- ❖ The goal of project 1 is to view Temperature and Humidity sensor values from nodeMCU in a website (the sensor data is sent over Wi-Fi, they learnt to execute the code in backEnd and frontEnd with the help of command prompt).
- ❖ The goal of project 2 is to control the main voltage device from the website for e.g.: - Turning on/off a fan or bulb or anything connected to the main voltage, students were taught how to work on the hardware and software part of project 2 and assigned them to do that project.

Event Coordinators- Amisha Naik, Bhuvana Bharadwaj

Faculty Coordinators- Ambika K, Dr. M Vasantha Lakshmi

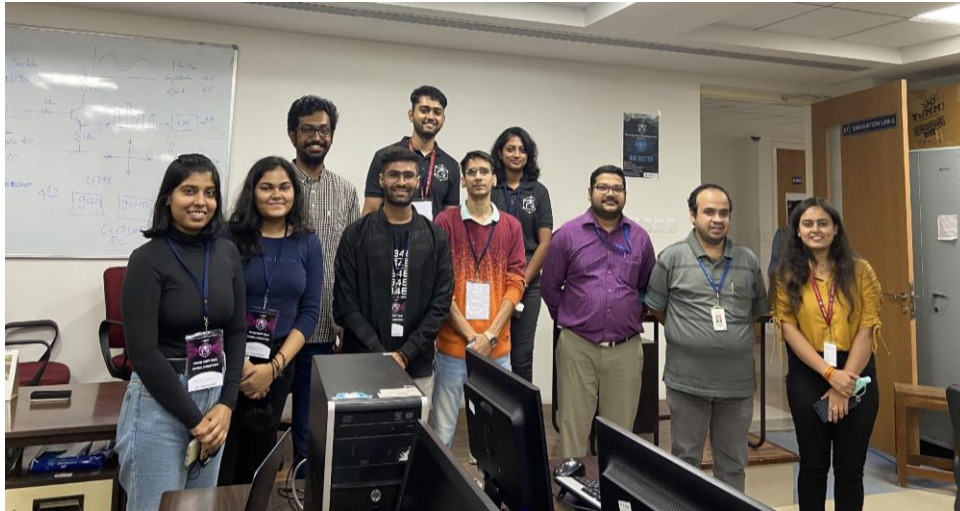




(27TH NOVEMBER, 2021)

BUG BUSTER REPORT

DEPARTMENT- ELECTRONICS AND TELECOMMUNICATION



Introduction

Bug buster event was about debugging the given code and trying to get the required output. We had chosen Python as our coding language for this event. We had our Alumni Sriram from the 2020 batch as our jury.

The event had 3 rounds, the first round was a pen-paper round for 30 marks, and students were given 20 mins to solve them. The next 2 rounds were held in our department computer lab using google colab. We had 18 participants. At the end of 3 rounds, we tallied their marks, and the first highest and the second highest got the prize money and certificate. Mr. Kritesh, Entrepreneur, Founder of The Engineer Store offered the internship opportunities.

Names of winners:

First place was won by - Pranjal Gulati

Second place was won by - Pankaj gupta

Learning Outcomes

1. participants were shown what was the error and were also taught how to debug them.
2. participants were introduced to different python libraries.





Event Coordinators- Charan K S , Amulya V

Faculty Coordinators- Dr. C.GURURAJ , Dr.PRASANNA KUMAR M.K.

Student Volunteers- Navneet Ujjain, Aayushi Verma, Anurag Soni, Malavika S, Anoushika Chaturvedi

Cash Flow Statement



1. Sources Of Funds

Events	Registration amount (Rs.)	Number of teams	Cash Inflow (Rs.)
Workshop on Arduino	400	11	4400
Workshop on IOT	400	22	8800
Bug Buster	50	28	1400
Total Registration Inflow			14600
Sponsorship			18000
Total			32600

2. Expenditure

Events	Expenses (Rs.)	Prize Money (Rs.)	Total Event Expenditure (Rs.)
Workshop on Arduino	560	2000	2560
Workshop on IOT	9688	0	9688
Bug Buster	0	1200	1200
Miscellaneous			500
Total Expenditure			13948

Total Savings = Net funds - Net Expenditure
= 32600 - 13948

Total Savings = Rs. 18,652

Total Saving Percentage = $(18652/32600)*100$

Total Saving Percentage = 57.21%