

Education to Excel

SBRR Mahajana First Grade College (Autonomous)

Jayalakshmipuram, Mysuru - 570 012

Affiliated to University of Mysore & Accredited with 'A' Grade by NAAC

College with Potential for Excellence

Department of BCA & IQAC organises

One Day Workshop on

IoT Applications

Resource Person

Dr. Pushpa D

Associate Professor

ISE Department, Maharaja Institute of Technology, Mysuru

Date: 02.06.2023

Time: 10.30 AM

Venue: AVC-III

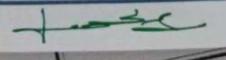
All are Welcome

Sri Manjunath KS

Dr. S R Ramesh

Chief Executive Officer & Academic Advisor Dr. B.R. Jayakumari

Principal



Mahajana Education Society (R) Education to Excel

SBRR Mahajana First Grade College (Autonomous)

Jayalakshmipuram, Mysuru – 570 012 Karnataka, INDIA Affiliated to University of Mysore Re-Accredited by NAAC with 'A' Grade, College with Potential for Excellence

Date:02/06/2023

Department Name: Bachelor of Computer Application

Report on One Day Workshop - Internet of Things and its Applications

Department of Computer Application and IQAC, SBRR Mahajana First Grade Collage, (Autonomous) Mysore had organised a workshop on "Internet of Things and its Applications" on 06th June 2023.

The resource person was Dr. Pushpa D, Associate Professor, Department. of Information Science, Maharaja Institute of Technology, Mysore. She has 12 years of teaching experiences, she has published 2 national journals and 10 international journals and attended 2 conferences.

"If you think that the internet has changed your life, think again. The IOT is about to change it all over again!"

Internet of Things is a new revolution of the Internet. A world where the real, digital and the virtual are converging to create smart environments that make energy, transport, cities and many other areas more intelligent. A device becoming a smart device is called IOT. Now a days there are many android and server based applications.

The speaker shared her thoughts on how IOT has proven to be a boon in the fields of education, healthcare and industry, paving the way for dynamic approaches and learning opportunities.

- She shared her thoughts on smartphones.
- The speaker also educated the audience on how IOT had allowed homes to be more than mere buildings. Homes, these days have become interactive abodes.
- Smartphones, or phones that can connect to the internet and run apps, are the most prevalent type of mobile device in nine of the 11 countries surveyed: A majority of adult's report using a smartphone. Usage is highest in Lebanon and Jordan and lowest in India
- The main head lights of the workshop are

Different types of Arduino board such as Arduino Uno, Arduino Uno R3 SMD,

Ardino Pro 3.348 MHz, Arduino mini, Aurdino Ethernet and their characteristics Power supply, clock speed, Digital I/O, Analog Input, PWM modulation and different kinds of interfacing. Wi-Fi module Programming with Arduino

Interfacing of sensors and uploading data on cloud, for Interfacing different types of sensors with Arduino and Arduino with database, different programming steps have been discussed

function, statement, control statement levels variables, math, pin mode, serial mode, digital mode variable, delay and for loop Interfacing and controlling various devices like LED, motors, sensors etc with Arduino

Four examples were given such as LED glow, switch sensing, Temperature display, small motor

Motion sensor switches can automatically turn the lights on or off or both. Both occupancy and vacancy switches leave the lights on if they detect motion in the room, so if you're perfectly still,

Users can access the IoT platform website's dashboard or web interface to visualize the they might turn the lights off. temperature values in real-time. Users can also setup up notifications or email alerts if the temperature exceeds certain predefined thresholds.

The IoT-enabled motor speed sensors use the EMF method to capture the voltage and convert it into a digital value. The motor moves in the presence of the voltage. The voltage flow is opposite to that of the permanent magnet coil. Unlike the Back EMF method, the EMF value helps

Temperature sensors work by measuring the voltage across the diode terminals. As the voltage rises, so does the temperature, and then a voltage drop occurs between the transistor terminals and the emitter (in the diode). There are different types of sensors, which are classified according to their connections.

80 students of the department of BCA, of I, II, III year benefited from the programme.

Principal Dr B R Jayakumari K S Manjunath, HOD of BCA and the staff members of the department were present on the occasion.

Dr. B.R Jayakumari Pincipal De coordinator **HOD** of Computer Application



