

Konnnect 2021_b

Annual Report
July 2020 – June 2021



Department of Telecommunication Engineering
Accredited by NBA for SIX years in the (Tier-I Format)

BMS COLLEGE OF ENGINEERING
Affiliated to VTU, Accredited by NAAC
Bengaluru-560019

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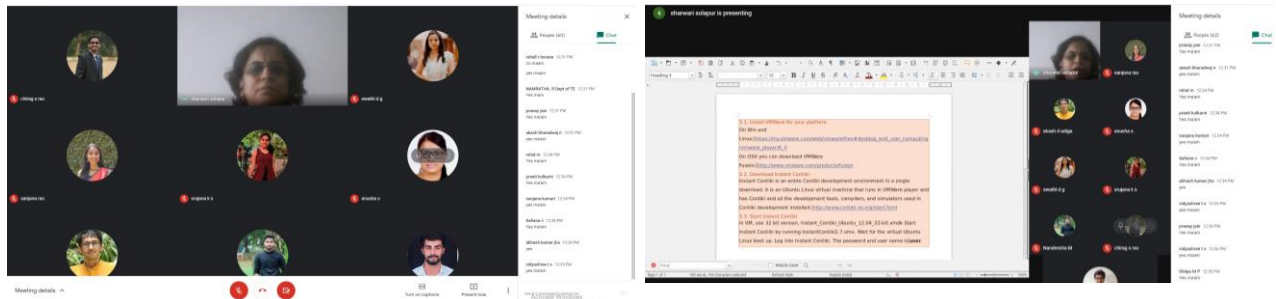
Workshops Organized

Sl.No	Title of Workshop	Date(s)	Participants
1	Workshop on IoT Programming using Contiki OS and Cooja Simulator	23 rd to 24 th December, 2020	64
2	TEQIP sponsored 60 hours online course on Future Skills on , 'Data Science and Data Analytics',	1 st to 27 th March, 2021	180
3	C Programming (extension of the Induction program)	10 th May , 2021 – 30 th June, 2021 30 Sessions	45
4	Electronic simulation tool – Multisim Live	15 th May – 22 nd May 2021	36
5	Two weeks online program on German Language titled 'Wir Lernen Deutsch	30th June , 2021	28
6	Basic Kannada	2 nd to 25 th June , 2021	8
7	Advance Kannada	2 nd to 25 th June , 2021	2

IOT PROGRAMMING USING CONTIKI OS AND COOJA SIMULATOR

23rd – 24th December, 2020

By, Mrs.Sharwari.S.Solapure Research Scholar, GIT, Belgavi,
ISOC- RD-SIG Board Member



Participants Statistics

Faculty: 02, Students: 62

Program Brief

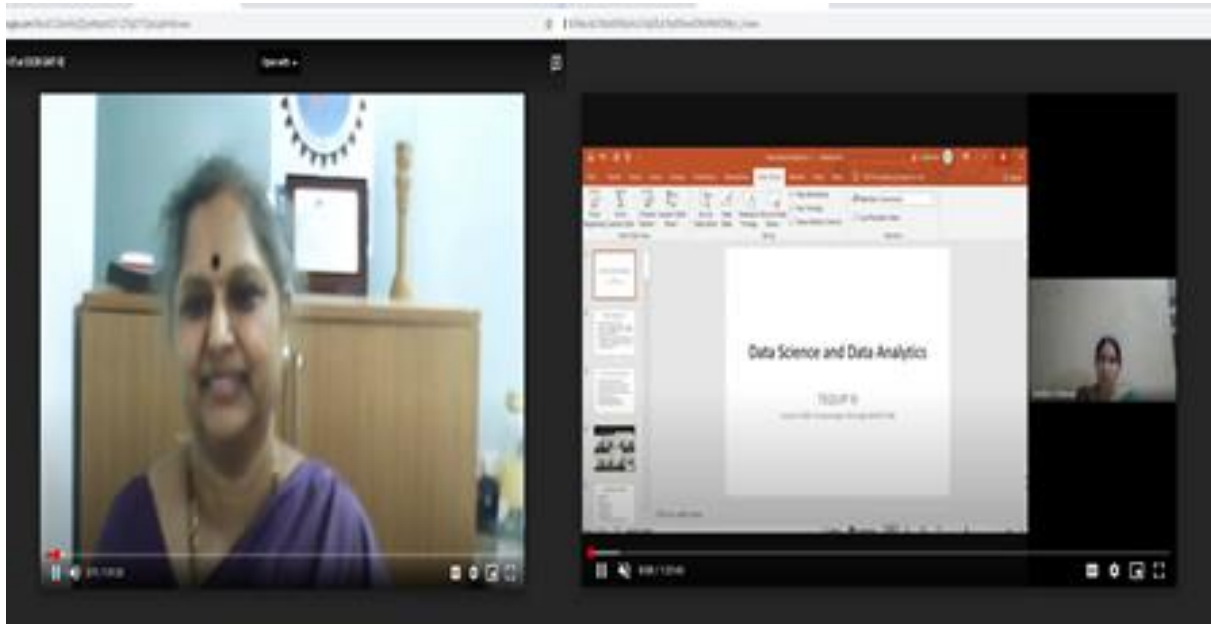
The first day was about the theory of IoT and the Cooja simulator installation. The definition of IoT, IIoT and Sensor networks were explained in the 1st day. The IoT adoption was explained after the terms with a graph showing the rate of adoption almost achieving 100% by the year 2030. Later the key applications of IoT were briefed through. A pictorial representation of a Smart world was explained with IoT adoption. The IoT protocols along with Hardware used were explained later. After the detailed explanation of IoT technologies, Speaker started with Contiki OS and Cooja Simulator. The open source OS required either Ubuntu or VMWare (Windows) to run. The first day concluded with the installation guide of the Instant Contiki and students were asked to install it on their PCs for the next day. The second day was the Hands-on of the Instant Cooja OS and Cooja Simulator. The session started off with the simulation of a network of 6 nodes where one node was made as the receiver and the other nodes as senders. The nodes were configured as Z1 nodes. The whole network was configured to simulate a sensor network where the receiver node was configured to take temperature data from the sender nodes. Madam briefed on the IoT modules and packages which can be used in a real-life scenario. Few students had some doubts during the demonstration and the speaker could clarify their doubts. After the demonstration of the network, there was an analysis performed on the data sent and received by the nodes.

Outcomes:

1. Students got to know about the simulation of sensor network to measure temperature
2. Data analysis using Cooja Simulator

Coordinator: Rajeshwari Hegde

**TEQIP SPONSORED
DATA SCIENCE AND DATA ANALYTICS**
1st to 27th March, 2021



Participants Statistics

Students: 180

Program Brief

As per the TEQIP mandate, Faculty who are trained on Future Skills, conducted by IITs in their respective area through ONLINE mode, had to conduct to further impart job-oriented training to the students of their institutes (at least a batch of 50) to make them industry ready for complying to the future skill requirements of IT-ITes industries, and target a minimum of 50 student registrations, and atleast 25% to qualify the program.

Accordingly, from March 1 to March 27, 2021, Dr B Kanmani, ETE, and Dr Smitha V Shenoy, MBA, successfully conducted the TEQIP sponsored 60 hours online course on Future Skills on, 'Data Science and Data Analytics', for 180 students registered from BE, MBA, MCA and M.Tech programs, culminating in the online exam conducted by NASCOMM on 29th March, 2021.

Out of the 180 registered, only 97 took the examination by NASCOMM. It is interesting to observe that out of these 97, who have taken the test, 7 cleared with Gold, 14 cleared with Silver and 15 cleared with Bronze Certification from NASCOMM

Coordinator: B Kanmani, ETE & Smitha V Shenoy, MBA

C PROGRAMMING

(extension of the Induction program)
10th May, 2021 – 30th June, 2021

Faculty :
Dr. Kanmani B
(HOD - ETE)
Dr. Balachandra K
(Assistant Professor)
Dr. Prasanna Kumar M.K.
(Assistant Professor)

CONTACT US
Lakshya Jain : 9521413919
(Chief Co-ordinator)

EXTENDED INDUCTION PROGRAM
By Coding Club of the ETE
BMS College of Engineering

ABOUT US

LAKSHYA JAIN 

R MADHUSUDAN 

AMOGHA T R 

ARCHISHMAN ZANZANEY 

NIKHIL M C 

VISHNU PRANAV R 

KEERTHANA R 

SIDDARTH P BADYA 

VINAY B S 

SUPRIYA R 

CHAITANYA KRISHNA SHARMA 

WAKHEE AHMED 

Participants Statistics

Students: 45

Program Brief

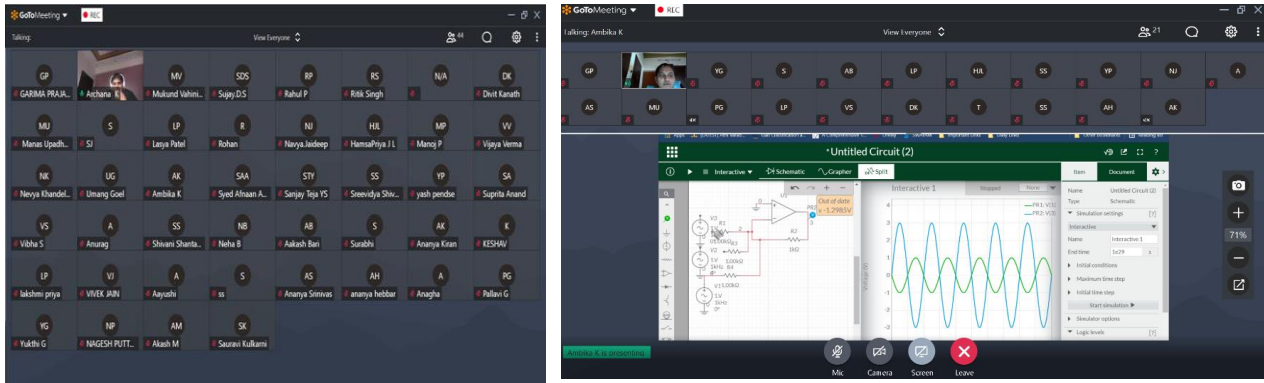
There were 12 members in our C programming team divided into 2 groups of each where each group were responsible for teaching a particular unit. We had a detailed plan as to how we were supposed to approach the students i.e., by assuming that had no prior knowledge of the subject they were being taught.

Introduction to Microcontrollers, 8051, architecture of 8051, Basics of Arduino, Understanding the components, Introduction to moth bot, understanding the mechanics of moth bot, coding moth bot from beginning in Arduino IDE. We implemented the code in Arduino IDE which was quiet challenging since the IDE was new to the students. We used as many comments and real life variables to make it easier for the students to understand.

Coordinator: B Kanmnai, Prasanna Kumar M K and Balachandra K

ELECTRONIC SIMULATION TOOL – MULTISIM LIVE

15th – 22nd May, 2021



Participants Statistics

Students: 36

Program Brief

To impart technical knowledge and give hands-on experience on the topic electronics simulation tool- multisim live. Moreover, this workshop was not only restricted to electronics branch student but also for other branch students to gain this skill.

In the 90mins of the session, speaker successfully imparted her knowledge on electronics and made it quite simple and interesting for the students. She guided us throughout the signing up process for the MULTISIM SIMULATION -TOOL available on the internet.

Further in the session, following topics were covered using the simulation multisim tool:

- (1) Forward and reverse bias condition-V-I Characteristics
- (2) Half wave rectifier
- (3) Bridge rectifier
- (4) Zener diode shunt regulator

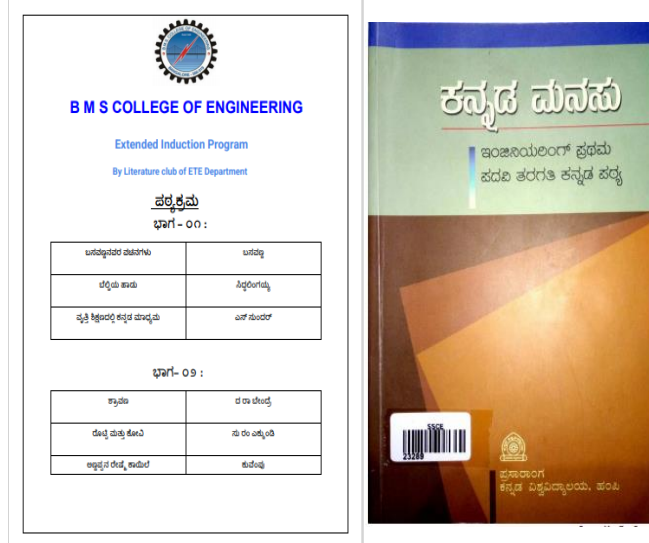
This was followed by a doubt session, wherein students interacted with the professors and cleared their doubts.

She explained us the complete topic of operational amplifiers with hands-on experience of the tool. The following topics were taught to us: Voltage follower, Inverting amplifier, Non-inverting amplifier. This was followed by a brief explanation of sub-topics with representation on the multisim tool. The output we got in the experiments were explained to us in detail.

Resource person & Coordinators: Ambika K and Archana K

BASIC KANNADA

2nd – 25th June, 2021



Participants Statistics

Students: 2

Program Brief

The Literature club of Electronics and Telecommunication offered a course titled “Kannada”, which was further divided into “Advanced Kannada” and “Basic Kannada”. The main objective of this course, Advanced Kannada was to do Cultural studies by the students who know how to speak Kannada. This cultural study incorporated cultural history, ecology, religion and the practice in students. By doing this the student could take the existing knowledge about Kannada to next level. Also, to give exposure to Kannada Literature.

Two students registered for the course, Arjuna Somayaji C S and Rachana R Woodi. The course was conducted for three continuous weeks. 15 online classes were conducted to the registered students. The Google Meet platform was used to conduct virtual classes. The classes were from 5 to 6 PM every day

The course commenced from 2nd June 2021. In the held online sessions each instructor involved themselves in teaching the selected chapters and poems from the prescribed textbook. After every chapter and poems, activities were conducted. CIE was conducted for 2 parts of the divided syllabus.

Coordinators: Ambika K and B Kanmani

ADVANCE KANNADA

2nd – 25th June, 2021

V J Manoj



Sriram Koya



Nidhishree Arun



Sagar M S



Srihari P S



Shakil Ahmed B R



Mounika M



G A Bharath



Participants Statistics

Students: 8

Program Brief

As a part of the literary club, there were online sessions scheduled with an intention of distributing the knowledge of languages like Kannada and German. Course on Kannada is further divided as Basic Kannada and Advanced Kannada. Basic Kannada was a program started as an initiative by the department of electronics and telecommunication engineering. The course objective was to inculcate the knowledge of the regional language of the state 'Kannada', to those who face difficulty in speaking and understanding the language especially to the students from the different states.

There were three faculty coordinators for the program helping the students to handle the session. There were seven volunteers and one student coordinator who engaged the classes of the basic Kannada course

Coordinators: Archana K and B Kanmani

Extension Lectures Organized

SNo	Name of the Invited Scholar with full Address	Title of the Lecture Delivered	Date of Lecture
1	Vinay Rao Staff Engineer, Cohesity, Alumni	Journey of translate an Idea to a Prototype	3 rd July ,2020
2	Sushma Srikanth Senior Director, CISCO, USA	Dis aggregation of HW and SW in Networking-Trends	6 th July, 2020
3	Sanjay Sehgal Chairman & CEO, MSys Technologies, USA.	How to be a successful entrepreneur?	10 th July, 2020
4	Dr. Shankar Sathyapal, Director, Indian Institute of HAMS	HAM (AMATEUR) Radio In Present Technologies	23 rd July, 2020
5	Prof Mukul Goyal, CSE, University of Milwaukee, USA.	Opportunities and Higher Studies at UWM and the College of Engineering and applied Science	11 th August, 2020
6	Ms Ashwija, IAS	First Step towards UPSC Civil service Examination	22th September, 2020

Journey of translate an Idea to a Prototype

By, Mr Vinay Rao

Staff Engineer, Cohesity, Alumni

3rd July, 2020



Participants Statistics

Faculty, and Students: 390

Program Brief

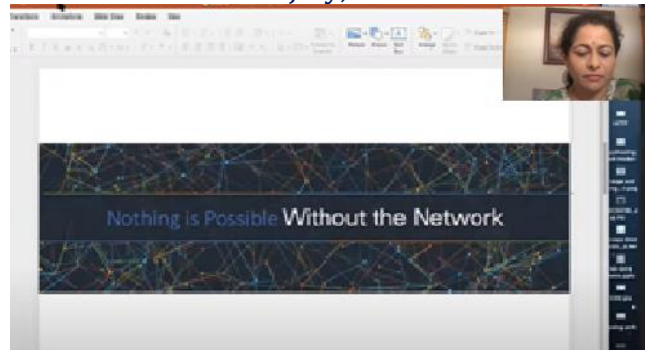
The webinar started with a brief introduction to the speaker and his experience of publishing the research work in the IEEE conference. He also shared his experience on converting an Engineering idea into prototype. The steps involved in translating an idea to help humanity and peer group to have a positive impact were dealt with. He also covered, what is the credibility to cover this topic with engineering students. He related his journey with the participants though the experience is individualistic. The importance to appreciate the journey of translating the idea rather than the product was also covered. The session concluded with questions and answers.

Coordinators: Rajeshwari Hegde

Disaggregation of HW and SW in Networking-Trends

By, Sushma Srikanth, Senior Director, CISCO, USA

6th July, 2020



Participants Statistics

Faculty, and Students: 200

Program Brief

Under BMSCE & NCET IEEE Student branches, a webinar was organised on the topic 'Dis-Aggregation of HW and SW in Networking – Trends'. The webinar was held on 4th of July 2020 at 10 AM. The Webinar was conducted using the zoom platform and Youtube broadcast. Dr.Rajeswari Hegde (Professor, ETE dept BMSCE Bangalore) and Dr.Mamta G(Director, Training & Placement , NCET Bangalore) were the co-ordinators of the event. Around 200+ Faculty and students from colleges across the country participated in the webinar.

Rahul M (Student of BMSCE) introduced the Speaker Ms.Sushama Srikanth who is very well experienced in technologies like Embedded and Application software development with a proven track of customer focus. Ms.Sushama started the webinar with the megatrends in network and transformation in networking. Usage of Switches in automation, Simplifying switches were some of the topics explained in the beginning. The challenges faced by the vendors in software and hardware level were explained later. The disaggregation of switch components were illustrated in detail. Following the explanation of dis-aggregation of HW and SW the speaker then talked about one of the main applications: Automation. Model based Automation, common management layer, Different stages/journeys of automation and Data science in network automation were some of the important topics discussed. The webinar ended with the conclusion preferring closed loop automation to open loop automation. Following the conclusion a Q&A session was conducted and there were some interesting questions from the participants about Telemetry, OpenDev and automation etc.

Coordinators: Rajeshwari Hegde

How to be a successful entrepreneur?

By, Mr. Sanjay Sehgal, Chairman and CEO of M Sys Technologies,
Atlanta, Georgia, USA

10th July, 2020



Participants Statistics

Faculty, and Students: 1300

Program Brief

The webinar started with a set of questions for the audience on meti.com such as

1. Who in your opinion is a better entrepreneur?
2. Is it important to start a company or business to become an entrepreneur?

The entrepreneur comes from the French word, Entrepreneur which means to undertake or set out a new mission or venture. It does not say anything about setting out a million dollar company. Entrepreneurship is your ability to solve a problem by new means. A problem that has not been solved before. He explained the quote taken from the book which he liked the most. "Being an entrepreneur simply means being someone who wants to make a difference to other people's lives". He also explained the stories of successful entrepreneurs

Coordinators: Rajeshwari Hegde

Ham (Amateur) Radio in present Technologies

By, Dr. Shankar Sathyapal, Director, Indian Institute of HAMS

23rd July, 2020



Participants Statistics

Faculty, and Students: 110

Program Brief

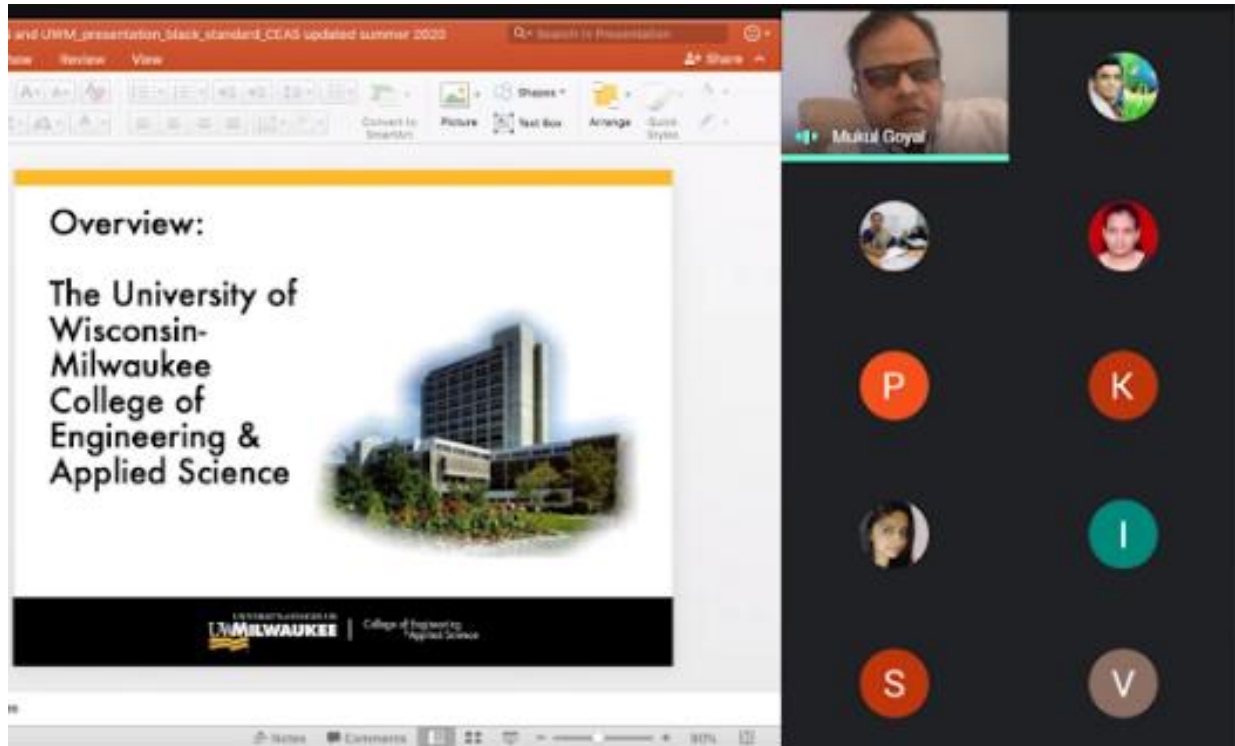
The year 2020 is the year where most of the days were spent indoors. With the aim of continuing the learning and keeping ourselves updated, an online webinar on "Ham (Amateur) Radio in present Technologies" by Dr. Shankar Sathyapal, Director, Indian Institute of HAMS was organized by the Department of Electronics and Telecommunication Engineering, BMS College of Engineering in association with the IEEE

Dr B kanmani, Prof and HoD of Electronics and Telecommunication Engineering department, BMS College of Engineering thanked the Bangalore Armature club for starting HAM club in the department and its activities. The webinar was started with Dr Satyapal introducing what HAM is all about. Licensed HAMS are able to communicate with other HAMS across the globe, able to conduct radio experiments, can provide HAM communication network during the times of festivals like Mahamasthakabhisheka and sport events like national games and natural disasters. Indian Institute of HAMS (IIH) being founded in 1993, Dr Satyapal spoke about the developments happening in the field, the do's and don'ts of HAM, and the activities conducted by the institute. He mentioned the use of software and internet in HAM. He also demonstrated their service in the state in fighting against the COVID-19. He briefed on the procedures required to become a HAM and introduced the young HAMS in the field.

Coordinators: Rajeshwari Hegde

**Opportunities and Higher Studies at
UWM and the College of Engineering and Applied Science
University of Wisconsin – Milwaukee, USA
By, Dr. Mukul Goyal, Associate Professor, Computer Science,
University of Wisconsin, USA**

11th August, 2020



Participants Statistics

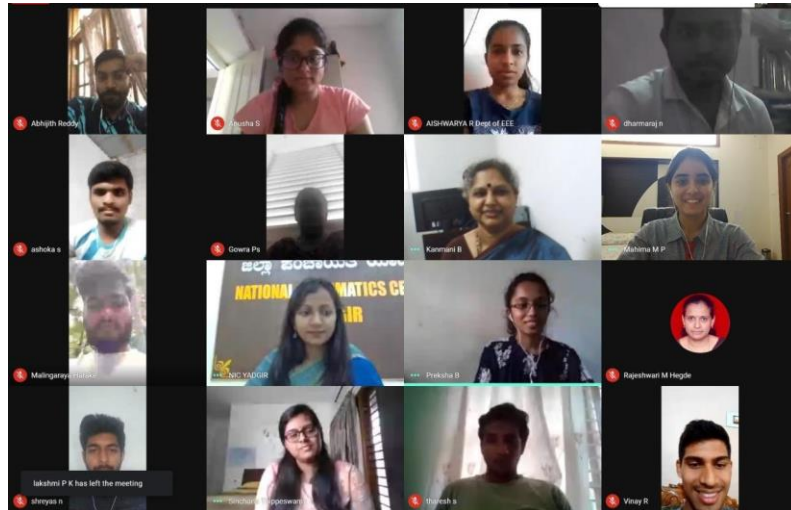
Faculty, and Students: 45

Program Brief

The event commenced with an introduction about the Higher Education cell at BMSCE by Prof Rameshaiah, and welcome address by Dr B Kanmani. This was then followed by a presentation by the invited Speaker: Dr Mukul Goyal, who took us through the various opportunities available for further collaboration with University of Wisconsin, Milwaukee, USE. All participants greatly benefited through the session. We at BMSCE, will explore taking the initiative forward. The session concluded with the vote of thanks by Prof Namratha

Coordinators: B Kanmani

Your first step towards UPSC Civil Services Examination By, Miss. Ashwija B V, IAS 11th September, 2020



Participants Statistics

Faculty, and Students: 120

Program Brief

The event kick-started by event coordinator Mahima M.P welcoming the guest of honour followed by a brief introduction. The speaker for the event was Ashwija B V, IAS who was an Assistant Commissioner under Trainee in Yadgir district of Karnataka. She is one of the notable alumni (Batch of 2014) of the Electronics and Telecommunication department. Rohan Jagadeesh, IPS, a friend of Ashwija was also present for the event. He and Ashwija had prepared for the UPSC exams together at Insights, Bangalore. He shared his experience with the audience.

She successfully cleared her UPSC examination in her third attempt in 2018. She inspired all the participants to never lose hope if they won't achieve success in their first attempt. She also believes that hard work, dedication, integrity and honesty are the pillars of success.

Ashwija walked all the participants through her journey and explained how her day used to begin and end during her preparation for the UPSC examination. She also emphasised on the impact of consistency in her life. She explained in depth about the conduction of UPSC exams which is in three stages - prelims, mains and personality test through a PowerPoint presentation.

Coordinators: B Kanmani

Faculty as Resource Persons

Sl.	Name of Faculty	Nature of Program	Title Program	Date	Venue
1	Dr. B Kanmani	Workshop	AICTE Sponsored STTP- Outcome Based Education with Assessment and Evaluation, Phase-I	11th November, 2020	Sahrdaya College of Engineering and Technology, Kerala
		Workshop	AICTE Sponsored STTP- Outcome Based Education with Assessment and Evaluation, Phase-II	25th November, 2020	Sahrdaya College of Engineering and Technology, Kerala
		Workshop	AICTE Sponsored STTP- Outcome Based Education with Assessment and Evaluation, Phase-III	9th December, 2020	Sahrdaya College of Engineering and Technology, Kerala
		ATAL FDP	Outcomes Based Education	9th February, 2021	Yashwantrao Chavan College of Engineering, Nagpur
		Online - talk	Effective Implementation of OBE through COs	10th February, 2021	Malnad College of Engineering, Hassan
		Faculty Orientation Program	Curriculum Design	24th May, 2021	Curriculum Development Cell of Nehru Arts and Science College, Coimbatore

2	Dr. Rajeshwari Hegde	Online - Workshop	Managing the Self during Pandemic	11th July , 2020	EWIT, Bengaluru
		Short term Training Program	Analysis and research aspects of effect of stress on physical and mental wellbeing	11th July , 2020	KLS Gogte institute of technology, Belagavi
		Online FDP	Lifestyle Change and Self-Management	3rd August, 2020	New Horizon College of Engineering,
		AICTE ATAL workshop	Robotics for Teachers	14th October, 2020	Dr. AIT
		AICTE ATAL workshop	Artificial Intelligence: Algorithms and Applications	11th November 2020	PDA College of Engineering, Kaburgi
		Pre-registration colloquium of a research scholar	Panel member	27th November, 2020	Heartfulness Research Center, Mysore
		Student Induction Program	The Power of Thoughts	17th December, 2020	T John Institute of Technology, Bengaluru
		Student Induction Program	The Power of Thoughts	18th December, 2020	EWIT, Bengaluru
		Online - talk	The Power of Thoughts in Stress Management for Women	20th February, 2021	AMC College of Engineering, Bangalore
		Student Induction Program	The Power of Thoughts	5th May, 2021	HKBK College of Engineering
		Online - talk	Research methodology	21st May, 2021	Heartfulness Research Center, Mysore
		Online - talk	Research methodology	5th June, 2021	Heartfulness Research Center, Mysore
		Jury member	5th National level IEEE Project Competition	26th June, 2021	GSSSIETW, Mysuru
3	Dr VasanthaLakshami	Online Workshop	Virtual Lab Conduction	23rd - 24th November, 2020	NITK, Surathkal, Mangalore

4	Dr.Manjunath P S	Panel discussion Member	Disability inclusion in Higher Education and Employment	29th January, 2021	NGO- Youth4jobs , Bengaluru
5	Dr.C.Gururaj	Session Chair	2nd Springer International Conference on Adaptive Computational Intelligence	15th – 16th December, 2020	GSSSIETW, Mysuru
		Jury member	5th National level IEEE Project Competition	26th June, 2021	GSSSIETW, Mysuru
6	Prof. Ambika K	Online - Workshop	Online Workshop On Electronics Simulation Multisim- Live	15th – 22nd May , 2021	BMSCE
7	Prof. Archana K	Online - Workshop	Online Workshop On Electronics Simulation Multisim- Live	15th – 22nd May , 2021	BMSCE
8	Dr. Prasanna Kumar MK	Online – Workshop	Introduction to Speech Processing and its Applications	19th September, 2020	Vivekananda College of Engineering & Technology, Puttur

Faculty Training Program Participated

Sl. No	Name of Faculty	Program attended	Date	Venue
1	Dr .B. Kanmani	IEEE ABET webinar on Accreditation and Quality of Engineering Education in South Asia	8 th July, 2020	IEEE India Council
		Virtual Labs- Effective tools for Testing and Learning,	10 th July, 2020	Cummins College of Engineering for Women Nagpur
		How to choose right journal	14 th July , 2020	ICRD, BMSCE
		Webinar 'Demystifying the New Education Policy, Impact on the Future of Education System'	8 th August, 2020	Lead India Foundation
		Online short course on Data Science & Analytics	11 th – 23 rd January 2021	IIT- Gandhinagar
		Insights in to Indian Knowledge Systems	26 th March 2021	Vikasana -Bangalore university
2	Dr.Rajeshwari Hegde	One week training program on "Analysis and research aspects of effect of stress on physical and mental Well being".	7 th - 11 th July, 2020	KLS Gogte institute of technology, Belagavi
		One week short term training program on "A Holistic Approach To Life During The COVID Pandemic",	10 th – 15 th July, 2020	Dayananda Sagar College of Dental Sciences in association with The Heartfulness Institute
		Four week online course on "Introduction to the Internet of Things and Embedded Systems	25 th July, 2020	Coursera
		Resilience in Crisis	4 th – 9 th August, 2020	Heartfulness Institute
		Three day FDP on "Lifestyle Change and Self-Management"	3 rd – 5 th August, 2020	New Horizon College of Engineering"

2	Dr.Rajehwari Hegde	Meditation and the Evolution of Consciousness with Daaji”	10 th August, 2020	Udemy platform
		Six week course on “Python Basics” offered by University of Michigan	15 th August, 2020	Coursera platform
		Five day national webseries on "Become Your Own Masterpiece" organized by Value Education Cell,	25 th – 29 th August, 2020	Babu Banarasi Das Northern India Institute of Technology, Lucknow in association with Heartfulness Education Trust.
		Six week course on Smart Devices and Mobile Emerging Technologies on Coursera platform	25 th September, 2020	Coursera
		Mind Control: Managing Your Mental Health During COVID-19	16 th November, 2020	Coursera
		Seven week course on “The Science of Success: What Researchers Know that You Should Know”	19 th December, 2020	Coursera
		National education conclave on ‘Re Imagining University Education with a Heart- Centered Approach’	12 th -13 th January, 2021	Heartful campus
		Yoga for Unity and Well-being 100 days of yoga program	14 th March, 2021	Heartfulness
3	Dr. N. Srinivasa Rao	Five days FDP on “E-Content Creation for MOOCs and MOODLE”	10 th – 14 th July, 2020	Institute of Engineering and Technology,
		How to choose right journal	14 th July, 2020	ICRD, BMSCE
		Five day FDP on “Role of Education for Industry 4.0: Challenges & Opportunities	10 th – 14 th August, 2020	MSRIT, Bangalore

4	Prof P S Gowra	How to choose right journal	14 th July , 2020	ICRD, BMSCE
		Resilience in Crisis	4 th - 9 th August, 2020	Heartfulness Institute
5	Prof. Pushpavathi K.P	How to choose right journal	14 th July , 2020	ICRD, BMSCE
		Two week online FDP on “Applied Data Science”	6 th – 17 th July, 2020	ECE, BMSCE,
		One week ATAL-AICTE FDP on Data Sciences	7 th – 11 th September, 2020	University of Hyderabad
		IEEE Workshop on “Microwave and Antenna Application in 5G”	8 th – 13 th Dec, 2020	AP-MTT Chapter Bangalore and IEEE Bangalore Section
6	Dr. M. Vasantha Lakshmi	How to choose right journal	14 th July , 2020	ICRD, BMSCE
		Two week online FDP on “Applied Data Science”	6 th – 17 th July, 2020	ECE, BMSCE
		TEQIP-III one week FDP on “Research Avenues in Healthcare Technology”	21 st – 25 th July, 2020	EI, SJCE, Mysuru
		Four week course on AI for everyone of Coursera.	6 th August, 2020	Coursera
		Four week course on Cybersecurity and the internet of things	14 th August, 2020	Coursera
		Four week course on Introduction to Artificial Intelligence	19 th August, 2020	Coursera
		One week ATAL-AICTE FDP on Cyber Security	7 th - 11 th September, 2020	Hyderabad Institute of Technology and Management, Hyderabad
		National level Webinar on Future of Higher Education in India – Turning Challenges into Opportunities.	25 th September 2020	BMSIT

7	Prof. T.Anushalalitha	How to choose right journal	14 th July, 2020	ICRD, BMSCE
		One Week Webinar on,"Advanced Antenna Design and Development for RF Communication Systems"	20 th - 25 th July, 2020	IETE Bangalore and ATMS
		TEQIP – III sponsored International FDP on Electromagnetics to 5G	7 th – 11 th Sep, 2020	SPIU Uttar pradesh
		Future of Higher Education in India- Turning Challenges into Opportunities.	25 th Sep, 2020	BMSIT- CESS
		TEQIP – III sponsored National Webinar on Transformation in Electronics & Communication Engineering	3 rd Oct, 2020	NPIU
		TEQIP – III sponsored One week FDP on Functional Material for Engineering Applications	15 th -19 th Feb, 2021	BMSCE
		online short course on, Design of CMOS Operational Amplifier ICs-A unique pedagogical approach	5 th -11 th March, 2021	IIT Gandhinagar
		TEQIP – III sponsored 5 day Seminar on Advance Biomaterials for Biomedical Applications	17 th - 22 nd March, 2021	BMSCE and Sree Chitra Tirunal Institute for Medical Sciences & Technology
8	Dr. Manjunath PS	IEEE-How to choose right Journal?	14 th July, 2020	BMSCE
		Two week online FDP on Applied Data Science	6 th - 17 th July, 2020	BMSCE
		Two week online FDP on Advanced Optimization Techniques & hands on with MATLAB/SCILAB	13 th - 24 th July, 2020	Electronics & ICT academies
		5days National level FDP on Disruptive Technologies: Augmented Reality & its Applications	13 th - 17 th July, 2020	Chitkara University
		One week capacity building workshop on OBE and NBA Accreditation Process	27 th - 31 st July, 2020	BVICAM , New Delhi
		One week value-added course on Challenges and Opportunities in the Semiconductor Industry	10 th - 14 th August, 2020	IETE, BMSCE

9	Dr. Balachandra K	Introduction to programming in C	3 rd July, 2020	Coursera
		One week ATAL-AICTE FDP on Block Chain	14 th - 19 th September, 2020	NIT, Raipur.
		NPTEL courses on Microwave Theory and Techniques,	28 th December, 2020	NPTEL
		NPTEL courses on Applied Electromagnetics	28 th December, 2020	NPTEL
		One week ATAL-AICTE FDP on AI	28 th Dec – 1 st Jan 2021	NIT New Delhi
		Online workshop on “Advanced Materials for Power Electronic Circuits	1 st - 5 th March, 2021	EEE, BMSCE
		An Introduction to Information Theory” and “Tools in Scientific Computing	Jan – Mar, 2021 (8 weeks)	NPTEL
10	Dr. C.Gururaj	One week FDP on “Natural Language Processing (NLP)”	30 th June – 4 th July, 2020	REVA University, Bangalore.
		One week FDP on “Advances in Artificial Intelligence, Machine Learning & Robotics”.	6 th – 10 th July, 2020	Vidyavardhaka College of Engineering, Mysuru
		One week FDP on “AI and ML Applications in Image Processing using Modern Tools	13 th – 18 th July, 2020	MSRIT, Bengaluru
		How to choose right journal	14 th July, 2020	ICRD, BMSCE
		One week FDP on “AI and ML techniques in VLSI Design”	20 th – 24 th July, 2020	MSRIT, Bengaluru
		One week online FDP on IOT and Data Analytics An End- End Perspective	27 th July – 1 st August, 2020	BMSCE
		One week AICTE Sponsored FDP on “High Performance Intelligent Real Time Embedded System Design and Internet of Things to Accelerate Automation System into Autonomous System”.	3 rd – 8 th August, 2020	R.M.K. Engineering College, TN

10	Dr. C.Gururaj	One week online course on "Health GIS: Geoinformatics for COVID19"	15 th – 19 th June , 2020	IIRS – ISRO
		One week AICTE Sponsored FDP on "Soft Computing Techniques in Engineering Applications"	10 th – 16 th August, 2020	Syed Ammal Engineering College, TN
		Seven week course in coursera with title Programming for everybody: getting started with python.	26 th August, 2020	Coursera
		One week AICTE Sponsored STTP on Cyber Security, Cyber Forensics and Cyber Laws	31 st August – 5 th September, 2020	Hindustan Institute of Technology and Science, TN.
		One week AICTE Sponsored STTP on Design of Knowledge based Systems using Artificial Intelligence and Machine Learning models: In the context of Agricultural and Food products	21 st - 26 th September, 2020	Manipal Institute of Technology, Manipal.
		One Week FDP on Advanced Excel with Data Visualization	11 th – 16 th May, 2021	E & ICT Academy, IIT Kanpur
		One Week FDP on Competitive Coding	17 th – 22 nd May, 2021	E & ICT Academy, IIT Kanpur
		One Week FDP on Cyber Security	24 th – 29 th May, 2021	E & ICT Academy, IIT Kanpur
11	Prof. Ambika K	Contemporary Research trends in E&C and Computer science	6 th - 10 th July, 2020	VTU, Kalaburgi
		Applied data science	6 th - 17 th July, 2020	BMSCE
		Mathematical Perspectives On Computational Science And Engineering	6 th - 10 th July, 2020	Ramaiah Institute of Technology

11	Prof. Ambika K	Programming for everybody: Getting Started with Python.	5 th Aug 2020	Coursera
		Data Sciences	16 th - 20 th September 2020	ATAL- K.E Society's Rajarambapu Institute of Technology, Rajaramnagar
		Deep learning Applications in Image processing under security ambit	5 th - 9 th October 2020	NIT, Rourkela
		Cyber security	24 th May - 29 th May 2021	IITK
12	Prof. Shreenivas B	Block Chian Basics	3 rd July , 2020	Coursera
		Internet of Things: How did we get here?	4 th July, 2020 (2 Weeks)	Coursera: University of California San Diego
		One week FDP on "Mathematical perspectives on computational science and engineering"	6 th – 10 th July, 2020	MSRIT, Bangalore
		How to choose right journal	14 th July , 2020	ICRD, BMSCE
		One week FDP on "Sensors and their applications"	13 th – 17 th July, 2020	MSRIT, Bengaluru
		Classical Cryptosystems and Core Concepts	19 th July, 2020	Coursera: University of Colorado System
		One week FDP on "Multidisciplinary trends in IT"	21 st – 25 th July, 2020	AIT, Chikkamagaluru
		Future of Higher Education in India – Turning Challenges into opportunities (Online)	25 th Sep, 2020	BMSIT , CESS
		Cryptography and Hashing Overview	23 rd Oct, 2020 (4 Weeks)	Coursera: University of California, Irvine
		Programming for Everybody (Getting Started with Python)	6 th Feb, 2021	Coursera: University of Michigan
		Internet of Things (IoT)	15 th - 19 th Feb, 2021	ATAL- Bannari Amman Institute of Technology

13	Dr. Prasanna Kumar MK	One week FDP on “Natural Language Processing (NLP)”	30 th June - 4 th July, 2020	REVA University, Bangalore.
		One week FDP on “Contemporary research trends in Electronics”	6 th – 10 th July, 2020	VTU, Belagavi.
		One week FDP on “Mathematical perspectives on computational science and engineering”	6 th – 10 th July, 2020	MSRIT, Bangalore
		One week training program on “Analysis and research aspects of effect of stress on physical and mental wellbeing”.	7 th – 11 th July, 2020	KLS Gogte institute of technology, Belagavi
		One week FDP on “Sensors and their applications”	13 th – 17 th July, 2020	Vemana Institution of Tech. Bengaluru
		One week FDP on “AI and ML Applications in Image Processing using Modern Tools	13 th – 18 th July, 2020	MSRIT, Bengaluru
		How to choose right journal	14 th July, 2020	ICRD, BMSCE
		One week FDP on “Latex and its applications”	20 th – 24 th July, 2020	VVCE, Mysuru
		One week FDP on “Multidisciplinary trends in IT ”	21 st – 25 th July, 2020	AIT, Chikkamagaluru
		One week AICTE Sponsored FDP on “Soft Computing Techniques in Engineering Applications”	10 th – 16 th August, 2020	Syed Ammal Engineering College, TN
		Seven week course in coursera with title Programming for everybody: getting started with python.	25 th August, 2020	Coursera
		One week ATAL-AICTE FDP on Data Science	16 th – 20 th September, 2020	RIT, Sangli, and Maharashtra
		IUCEE Online Teaching Course	July – Sep, 2020	IUCEE
		One Week FDP on Python Programming, conducted by	3 rd – 8 th May, 2021	E & ICT Academy, IIT Kanpur
		One Week FDP on Advanced Excel with Data Visualization	11 th – 16 th May, 2021	E & ICT Academy, IIT Kanpur
		One Week FDP on Competitive Coding	17 th – 22 nd May, 2021	E & ICT Academy, IIT Kanpur
		One Week FDP on Cyber Security	24 th – 29 th May, 2021	E & ICT Academy, IIT Kanpur
		One week FDP on Data Science	12 th – 27 th June, 2021	E & ICT Academy, IIT Kanpur

Faculty Publications

1. Sriram Ravishankar , **Prasanna Kumar M K**, Vinay Vasanth Patage, Sourabh Tiwari, Saksham Goya, “ Prediction of Age from Speech Features Using a Multi-Layer Perceptron Model”, 11th International Conference On Computing, Communication And Networking Technologies (ICCCNT) , IIT Kharagpur, West Bengal, 2ND July 2020. ISBN 978-1-7281-6852-4
2. **Pushpavathi.K.P, B.Kanmani,**” Narrow Band Digital Filter for Carrier Aggregation” Journal of science and Technology, Volume 5 , issue 5 Sep-October 2020 ISSN: 2456 – 5660, DOI: <https://doi.org/10.46243/jst.2020.v5.i5.pp70-77>
3. **Dr. C.Gururaj**, Bharath S, Praneeth R H, Tejesh M published a Patent titled ‘A System for Voice based Interactive Bot for Reservations and Bookings’ with the Controller General of Patents, Designs and Trademarks, GOI
4. **B Kanmani** published the book titled 'Effective Implementation of OBE Leading to Accreditation', by Indian Society for Technical Education (ISTE), under the Working Professionals Learning Project, an AICTE Project., 10th September 2020, ISBN: 978-81-89731-23-6.
5. B Kanmani published the paper titled, 'Curriculum design for Engineering Programs', in The Indian Journal of Technical Education, Vol. 41, No3 July-September issue, ISSN- 0971-3034, Published by Indian Society for Technical Education (ISTE), New Delhi.
6. Sriram R, Advait R, Koushik S and Prajwal, Dr Balachandra "A COMPARATIVE STUDY OF VARIOUS PITCH DETECTION ALGORITHMS" 5th IEEE International Conference on Computing, Communication and Security organized by IIT, Patna ,16th October 2020.
7. **Vasantha Lakshmi , B.Kanmani**, “PAPR Reduction in Offset QPSK OFDM through Lossy Source Coding”, International Journal of Electrical Engineering and Technology (IJEET) Volume 11, Issue 8, Pages: 1-10, October 2020 DOI 10.34218/IJEET.11.8.2020.001, 7th October 2020.
8. Rajeshwari Hegde, “Heart-brain Interface for the Holistic Development of Students-A Heartfulness Approach”, National Conference on “Values Today and Civilization Tomorrow, 2nd- 4th October 2020.
9. Harish H. Kenchannavar, Shrivatsa D. Perur, U. P. Kulkarni, **Rajeshwari Hegde** , “Statistical Analysis of Stress Levels in Students Pursuing Professional Course” Information and Communication Technology for Intelligent Systems Proceedings of ICTIS 2020, Volume 1 (Springer), November 2020, ISBN- 978-981-15-7078-0, pp 469-477, https://doi.org/10.1007/978-981-15-7078-0_45
10. **C Gururaj**, Satish Tunga, “AI based Feature Extraction through Content Based Image Retrieval”, Journal of Computational and Theoretical Nanoscience, SCI Journal, December 2020, volume 17, Issue 9-10, pp. 4050-4054, ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online), DOI: 10.1166/jctn.2020.9018, Cite Score 2019: 0.488, SJR 2019: 0.165, Impact factor:0.488
11. K.S. Tamilselvan, M.G. Sumithra, Balaji Sathyamoorthy, G. Murugeasan, **Rajeshwari Hegde**, “Analysis of Foot Ulcer Level Using Non-Invasive Technique Based on Image Segmentation for Type 2 Diabetic Patients”, Advances in Computing, Communication, Automation and Biomedical Technology, IJAICT India Publications 2020, pp 430-434 https://doi.org/10.46532/978-81-950008-1-4_094

12. **Rajeshwari Hegde** , Prasanna Kumar M.K., Gopalan Oppiliappan, “Learning Outcomes of a National Level Project Contest”, Journal of Engineering Education Transformations , Volume 34 , No. 2, October 2020, ISSN 2349-2473, eISSN 2394-1707, **DOI: <http://dx.doi.org/10.16920/jeet%2F2020%2Fv34i2%2F146590>**
13. **P S Gowra and Rajeshwari Hegde** “ Industry Institute Interaction for Outcome based Education” in the Journal of Engineering Education Transformations, **DOI: 10.16920/jeet/2021/v34i0/157118**, January 2021,
14. **Pushpavathi.K.P, B.Kanmani,**” Exploring the applications of Frozen Newton method in the design of Digital filters” International Journal of Advanced Trends in Computer Science and Engineering, 10(1), January- February 2021, 175-180. <https://doi.org/10.30534/ijatcse/2021/241012021>
15. Anagha. V, Amshu. K H, A. Kamal K and **B. Kumaraswamy**, published paper titled "Multi-level Speaker Authentication: An Overview and Implementation," at IEEE 17th India Council International Conference (INDICON), New Delhi, India, pp. 1-6, doi: 10.1109/INDICON49873.2020.9342423.
16. Abhash Kumar Jha, Advait Shankar, Rahul R. Borana, **C. Gururaj**, “ Compression in Communication Security using Huffman Encoding and Cipher Block Chaining”, First IEEE International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT), ISBN: 978-1-7281-5791-7, 19 – 20 February 2021, pp 275 – 280, Shri Shankaracharya Group of Institutions Bhilai, Chhattisgarh.
17. **Pushpavathi.K.P, Dr. B.Kanmani**, IIR filter design using Wavelets, International Journal of Engineering Research and Applications, vol.11-No.2 February 2021,pp. 01-06, ISSN: 2248-9622, DOI:10.9790/9622-1102030106, 2021
18. Saritha I G, **Rajeshwari Hegde**, Eradication of Malicious node Attack using a Priority Aware Frequency Domain Polling in Cyber Physical Systems, European Journal of Molecular and Clinical Medicine, ISSN 2515-8260 Volume 08, Issue 02, 2021, February 2021
19. Saritha I G, **Rajeshwari Hegde**, “Priority Aware Frequency Domain Polling Protocol in Cyber Physical Systems to Ejection of Malicious Node Attack”, International Journal of Intelligent Engineering & Systems, April 2021, Vol 4, no 3, pp 580-588, DOI: 10.22266/ijies2021.0630.49
20. **Dr N Srinivasa Rao**, Implementation of sequence detector using Reversible Logic, International Journal of Creative Research thoughts, | ISSN: 2320-2882, Volume 09, Issue 02, 2021, February 2021
21. **Ambika K**, View invariant gait authentication using Transfer learning, International Conference on Computational Intelligence and Data science, Feb 2021.
22. Akash Bharadwaj, Chirag Rao, Rahul, **C. Gururaj**, “Optimized Data Compression through Effective Analysis of JPEG Standard”, 3rd IEEE International Conference on Emerging Smart Computing and Informatics (ESCI), 5 – 7 March 2021, pp 36 (Abstract) AISSMS Institute of Information Technology, Pune

23. G.Shrividhya, Sukruta N Kashyap, Srujana K S, **C. Gururaj**, "Robust Data Compression algorithm utilizing LZW Framework based on Huffman Technique", 3rd IEEE International Conference on Emerging Smart Computing and Informatics (ESCI), 5 - 7 March 2021, pp 47 (Abstract) AISSMS Institute of Information Technology, Pune
24. Deepjyoti Deb, Asha KS, **Rajeshwari Hegde**, "Analysis and Comparison of Vehicular Adhoc Network Protocols using NS3", Journal of Huazhong University of Science and Technology, Vol 50, issue 4, pp 1-8, April 2021, ISSN-1671-4512
25. Asha K.S, **Rajeshwari Hegde**, K. Saravanan, "Intelligent Vehicular Traffic Signal Control for Vehicular AdHoc Networks", International Journal of Advanced Trends in Computer Science and Engineering, Volume 10, No.2, March - April 2021, pp 664-674, ISSN 2278-3091, **DOI: 10.30534/ijatcse/2021/291022021**
26. **Prasanna Kumar MK, R Kumaraswamy**, "Role of speech separation in verifying the speaker under degraded conditions using EMD and Hilbert Transform", International conference on Paradigms of communication, computing and data sciences (PCCDS 2021) , NIT, Kurukshetra, 7TH MAY 2021
27. Satish Tunga, D Jayadevappa, **C.Gururaj**, "Luminosity and Contrast Adjustment Based Enhancement of Diabetic Retinal Images", Turkish Journal of Physiotherapy and Rehabilitation, Vol.32, Issue 3, ISSN: 2651-4451, pp. 1842-1852, SCIE journal, may 2021.