|| Jai Sri Gurudev ||



### ADICHUNCHANAGIRI UNIVERSITY

## **BGS INSTITUTE OF TECHNOLOGY**

(Approved by AICTE, New Delhi; Affiliated to VTU, Belagavi & Recognised by Govt. of Karnataka)

BG Nagara - 571448, Nagamangala Taluk, Mandya District, Karnataka (INDIA) Tel: 08234-28841 - 419, Web: www.bgsit.ac.in





### CATANTO.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING



Volume - 10 | Issue - 13

PRANATHI

Sept 2020 - Mar 2021



# BLESSINGS....

The human life is granted because of divine grace. The aim of human life is to attain liberation after accomplishing the voyage on this earth successfully. Our ancestors have marked three-fold path to achieve that. The first one is Karma Marga, where we do not hanker after fruits of our labor; the second one is the path of devotion, Bhakti Marga; and the third one is the path of knowledge, Jnana Marga. All three paths are complementary to each other. Normally, those who travel in the barge of action are numerous. They don't listen if you say there is absolutely no space as it is filled with people already. That is why the boat of action is brimming with voyagers. The second boat, representing the devotion, will not be as full as the other one. Maybe it will be half full. Moreover, there won't be any competition among people to get into this boat. The third boat represents the path of knowledge; in this boat, the number of people will be very less. You can count the many our finger-tips. To orient the boat of life towards liberation, a man should accomplish the tasks with singular detachment. In addition to selfless work, he must also worship the Lord. That enables him to acquire knowledge. Knowledge leads towards liberation. To acquire such knowledge, one must be supplicant at the feet of a Guru. If a pupil accomplishes awareness through the Grace of his Guru, he can attain liberation as he would acquire self-knowledge as well.

# BGS INSTITUTE OF TECHNOLOGY

### **VISION**

BGSIT is committed to the cause of creating tomorrow's engineers by providing quality education inculcating ethical values.



### **MISSION**

- Imparting quality technical education by nurturing a conducive learning environment.
- Offering professional training to meet industry requirements.
- Providing education with a moral cultural base and spiritual touch.

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### VISION

To produce engineers by possessing good technical knowledge and ethics through quality education and research.



### **MISSION**

**M1:** Achieve excellence by providing good infrastructure and competent faculty.

**M2:** Strengthening the technical, soft skills, leadership qualities and ethical values to meet the industry requirements.

M3: Facilitate experimental learning through research projects.

### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

**PEO 1:** Graduates will be pursuing successful career and higher education.

**PEO 2:** Graduates will be able to apply the knowledge of programming skills to solve the real-world problems.

**PEO 3:** Graduates will display professional ethics to work in a team and lead the team by effectively communicating the ideas.

**PEO 4:** Graduates will practice lifelong learning.

### PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO 1:** Ability to apply Mathematical Methodologies, Management Principles and Ethics, Electronics and Embedded Systems and Programming Technologies to solve real time problems.

**PSO 2:** Ability to apply software design and development practices to develop software in emerging areas such as Internet of Things, Data Management, Social Networking and Security, Cloud and High-Performance Computing.

#### **Chair Person**

**Dr. B.K. Narendra**Principal

### **Editor**

Mrs. Shashikala S V
Professor

#### **Chief Editors**

Dr. B K Raghavendra, Professor & Head Dr. Ravi Kumar G K, Professor & Head (R&D)

#### **Faculty Coordinators**

Mrs. Nethravathi H.M, Assistant Professor

#### **Student Coordinators:**

Lakshmikanth Gowda M, 7th Sem CSE | Reshma M.S, 7th ISE

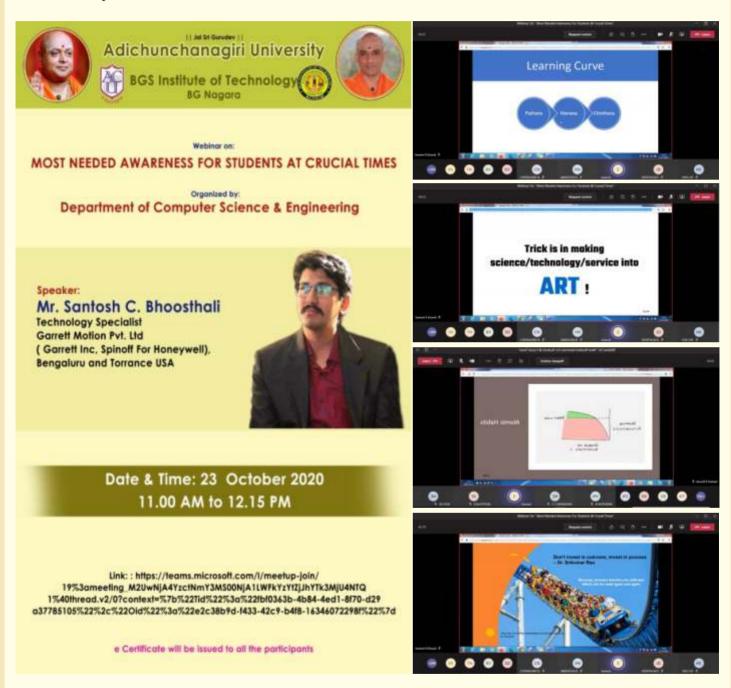
### **WEBINAR-2020**

RESOURCE PERSON : Mr. Santhosh C Bhoosthali

TOPIC : "Most Needed Awareness for Students at Crucial Times"

DATE : **24-10-2020, 11:00 AM to 12:15 PM** 

No. of Participants : 231



### **Objectives:**

The webinar concentrated on how to manage a crucial time and its awareness for the students. The resource person explained about "The way you do anything is the way you do everything". He also explained about the learning curve, mainly concentrated on pathana, manana, chinthana. He also concentrated on how to make networking which helps students in their currier building and explained about time management.

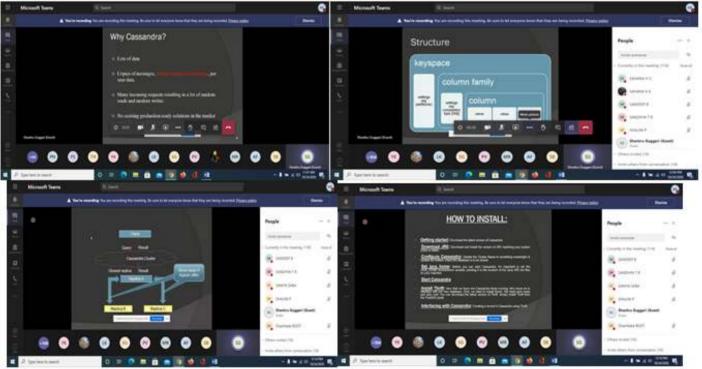
### **WEBINAR-2020**

RESOURCE PERSON : Mr. Shankru Guggari

TOPIC : "Big Data Computing with Cassendra"

DATE : 24-10-2020





### **Objectives:**

The webinar concentrated on history of Cassandra, Cassandra components and data model in Cassandra. The resource person explained about column family & structure of Cassandra, read & write operations in Cassandra. Demo was given on insulation of Cassandra and emphasized on benefits of Cassandra.

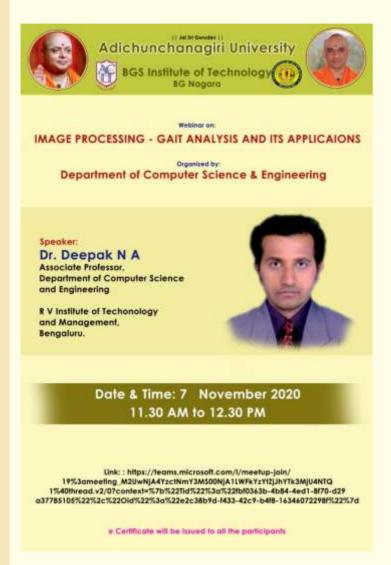
### **WEBINAR-2020**

RESOURCE PERSON : Dr. Deepak N A

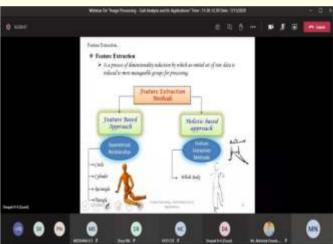
TOPIC : "Image Processing - GAIT Analysis and Its Applications"

DATE : **07-11-2020 11:30am to 12:30pm** 

No of Participants : 130







### Insights of Webinar:

- Scope of image processing in the present day.
- Variants of images in different platforms.
- Importance of machine learning in image processing.
- Discussed about two algorithms- i) wiener filter ii) image forensic
- GAIT applications and analysis.

# FACULTY DEVELOPMENT PROGRAM ON LEARN TO TEACH

(December 17th to 22nd December 2020)

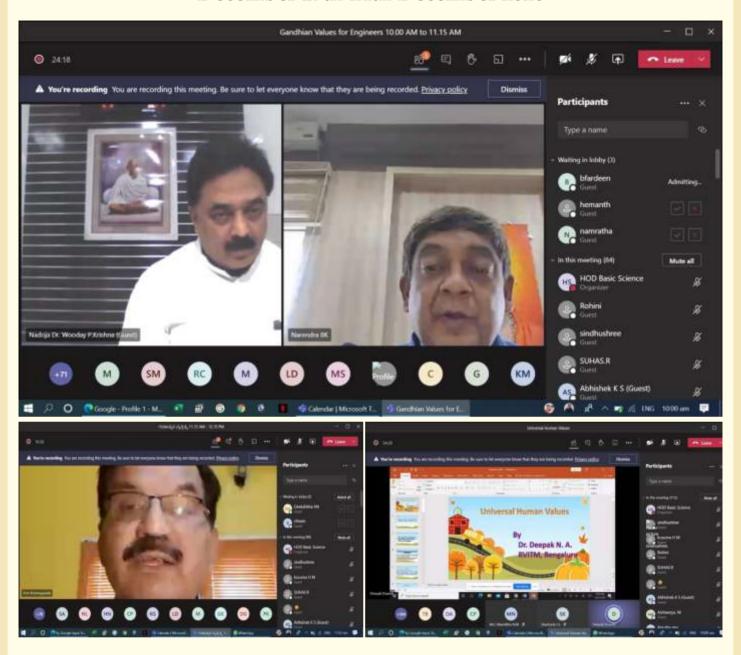






Adichunchanagiri University BGS Institute of Technology & BGS College of Educationare organizing Faculty Development Program from 17th December 2020 to 22nd December 2020 for the constituent colleges of ACU.

# Online Induction program for First year students from December 17th-24th December 2020



Adichunchanagiri University - BGS Institute of Technology, BG Nagara, has Organized 'Induction Program' for 1st Year Students from 17th to 24th December 2020 on online.

# TCS NATIONAL QUALIFIER TEST ON 28th DEC 2020

Heartily Congratulations for the 7th semester students selected by TCS NATIONAL QUALIFIER TEST 2020-2021 on 28th Dec 2020 from the Management, Principal, HOD, Staff Members and students of BGSIT.



AJAYS 4BW17CS005



BHAVAN A J 4BW17CS012



DEEPIKA A N 4BW17CS021



DIVYASHREE K H 4BW17CS023



LAKSHMIKANTH GOWDA M 4BW17CS034



**ROHIT KUMAR JHA** 4BW17CS057



SNEHA N J 4BW17CS068

# Placement Drives Addressing by Dr. C.K. Subbaraya, Registrar on Dec 30th 2020



ACU-BGSIT, BG Nagara Department of HRD organized talk to address all the final year students regarding their placement drives. Dr. C K Subbaraya addresses the gathering.

# **Inaugural Function on Jan 4th 2021**



ACU-BGSIT, BG Nagara BGSIT Organize Inaugural Function for First year students on 4th January 2021 in BGSIT seminar Hall. Dean of Engineering and Management, Dr. B.K. Narendra, welcomed and addressed the gathering. Dr. T. Mahadevaiah, Vice Principal - BGSIT, Heads of the various Departments, Staff members were present. More than 180 students, Parents and staff members were present in the program.

## Webinar on Jan 4th 2021





ACU-BGSIT, Department of R & D organized Webinar on "Entrepreneurship and Innovation as Career Opportunity" on January  $4th\ 2021$ .

### **Insights of Webinar:**

- Create positive and social consequences among customers.
- Increase power or status and creating a good design, guarantees.
- To build a career and innovation opportunity in business.

## Event Marathon on Jan 4th to Jan 7th 2021

ACU-BGSIT, Department of CSE organized Event Marathon from 4th to 7th January 2021.



# **Competitive Coding Contest on 4th Jan 2021**

Inter college online Competitive Coding contest has been conducted in BGSIT for students. Around 35 students were participated.

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Details	Challenges Advanced Settings	Moderators Notifications	Signups	Statistics
Na.	Username	Signup Date	Logged In ®	
1.	actithya61	05 Jan 2021, 10:03 IST	Yes	
2.	kiranbanjagaric	05 Jan 2021, 10:04 IST	Yes	
3.7	keerthanav1807	05 Jan 2021, 10:05 IST	Yes	
4.	chetjanku121	05 jan 2021, 10:05 IST	No	
5	rakeshrohitt21	05 Jan 2021, 10:11 IST	Yes	
6.	abhishekurst	05 Jan 2021, 10:12 IST	No	
7.	kirantavari7	05 Jan 2021, 10:17 IST	Yes	
8.	chethanku121	05 jan 2021, 10:17 IST	Yes	
9.	jnaneshgowda1018	05 Jan 2021, 10:17 IST	Yes	
10.	suhasdevang10	05 Jan 2021, 10:18 IST	Yes	
11.	kishorld318	05 Jan 2021, 10:19 IST	Yes	
12.	1_akshmikanth	05 Jan 2021, 10:20 IST	No	
13.	krupabalaraj027	05 Jan 2021, 10:21 IST	Yes	
14.	berugowda24	05 Jan 2021, 10:23 IST	Yes	
15.	alphishekns222001	05 Jan 2021, 10:23 IST	Yes	
16.	snehasneha64358	05 Jan 2021, 10:25 IST	Yes	

## Quiz Competition on 4th Jan 2021

The Quiz club of the college aims at identifying students with quizzing talent and creating opportunities for them to sharpen their quizzing skills. Quiz Club is a unique and exciting way to motivate, inspire, encourage and reward students in their quest for knowledge and provide them with the opportunity to celebrate their achievements as part of a high profile, national competition. The main objective of quiz club is to popularize quizzing activities among students and to encourage them to take part in all competitive examination at state and central level.

The Quiz competition was conducted on 04/01/2021 at 2:00 pm in online. There are 111 students attended the quiz and we got 104 responses. There were 30 questions, each carries 2 marks and negative 1 mark.

# **Cultural Competition on 5th Jan 2021**

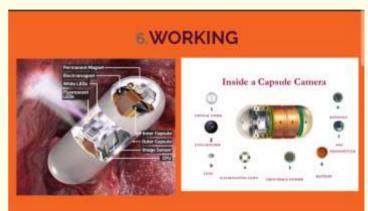


Inter college online Competitive pencil sketch and photography contest has been conducted in BGSIT for students. Around 50 students were registered for both pencil sketch and photography and 7 students participated for pencil sketch and 37 students participated for photography.

# **Technical Competition on 5th Jan 2021**

Inter college online Technical Event contest has been conducted in BGSIT for students. Around 06 students were participated.





## Innovative Club on 7th Jan 2021

The Ad Making competition was conducted on 07/01/2021 at 09:00 am in online. There are 05 students attended the Ad Making and we got 60 responses.



## IoT Club on 7th Jan 2021

The IoT Project competition was conducted on 07/01/2021 at 01:00 pm in online. There are 06 students attended the IoT Project and we got 30 responses.



# **Induction Program for MTech on January 20th 2021**



ACU-BGSIT:Induction Programme for M.Tech and MBA was organized at BGSIT Seminar Hall on 20th January 2021. Hon'ble Vice Chancellor Dr. S Chandrashekara Shetty, Pro-Vice Chancellor Prof. K Byrappa, Registrar C.K.Subbaraya, Registrar for Evaluation Dr. DVLN Prasad, Dean of Engineering and Management, were present. Dr. B.K. Narendra, welcomed and addressed the gathering. Dr. T. Mahadevaiah, Vice Principal - BGSIT, Heads of the various Engineering Departments, Staff members of various departments were present. More than 130 students and staff members were present in the program.

## 72nd Republic Day on January 26th 2021

The IoT Project competition was conducted on 07/01/2021 at 01:00 pm in online. There are 06 students attended the IoT Project and we got 30 responses.





ACU-BGSIT, Celebrated the 72nd Republic Day on 26th January 2021 at BGSIT Campus.

# Orientation program on "Stress Management" was organized at BGSIT Seminar Hall on 05th February 2021.

Dr. Shivakumar BK, Associate Professor, Department of Psychiatry, AIMS and Dr. Vinay HR, Assistant Professor, Department of Psychiatry, AIMS were the chief guests. They briefly told about the reasons of stress and how to manage the Stress in our day to day life.

Dr.M B Anandaraju, Director of HR and HOD, Department of ECE and Dr S H Manjunath, HOD, Department of Mechanical Engineering welcomed the guests.

Prof. Shashikala Department of CSE, Dr. Girish KB, Department of Mechanical, Faculty from various departments & around 300 first year BE students were present.

Mrs Kavitha BC, Department of ECE and Mrs Ramya Rani H V, Department of Mechanical were the program coordinators.







# **TCS Techbytes**

BITES &TCS has organizing Quiz Contest called "TCS TechBytes".

The initial round has been conducted in college on 10th Feb 2021. Our CSE/ISE 51 students have participated, out of which 10 members have got selected for the next round.

Team 1	Team 2	Team 3
Nisarga K.R - 5th Sem	Suhas V - 5th Sem	Kavya B - 5th Sem
Parvathi C.R - 5th Sem	Surya R - 5th Sem	Nayashree M - 5th Sem

Team 4 Team 5

Jyothi K.G - 3rd Sem Thejaswini K R - 3rd Sem Varshashree A.S - 3rd Sem Vibha B - 3rd Sem

## Name of the Faculty Coordinating the Participation:

Siddhartha B S, Asst. Professor, Dept., of CSE Abhishek B R, Programmer, Dept., of CSE



# **Induction Program on 12th Feb 2021**

ACU conducted Induction Program on 12th Feb 2021 at BGS Auditorium for first year students of all constituent colleges. The Program was held in the divine presence of Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji, Hon'ble Chancellor, Adichunchanagiri University. Chief Guests Shri Dr. C N Ashwathnarayan, Deputy Chief Minister and Mrs Meena Nagraj, IAS were present. Dr. S. Chandrashekar Shetty, Vice Chancellor Adichunchanagiri University addressed the gathering. Prof. Byrappa K Pro-Vice Chancellor Adichunchanagiri University, Dr. C K Subbaraya, Registrar Adichunchanagiri University and all Principals & Staffs of Constituent Colleges were present.









## Freshers day on 15th Monday 2021

Department of Computer Science & Engineering and Information Science & Engineering organized Freshers day for 2nd Year students on 15th Monday 2021 at Seminar Hall, BGSIT. Dr Raghavendra B K, Prof Shashikala V, Dr Ravikumar G K, Faculty, Students were present.







## Technical Talk on "How to choose a JOB or CAREER"

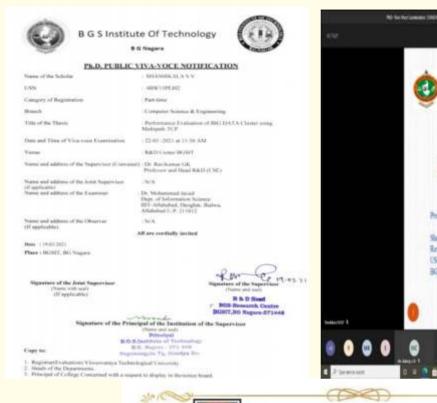
Department of Computer Science & Engineering and Information Science & Engineering organized Technical talk on "How to choose a JOB or CAREER" at BGS Computer Science seminar hall on 16th February 2021. Resource person was Mr.Rajesh, CEO, Aroha technologies. During the talk, he was giving several ideas about the topic to the students. Faculty and students from CSE and ISE were present.

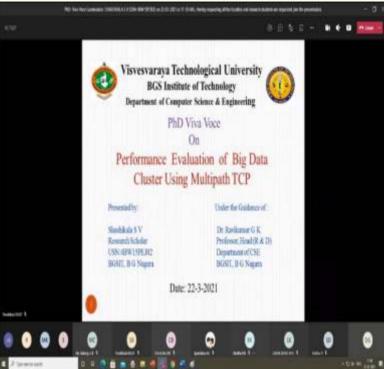




### ONLINE Ph.D VIVA-VOCE

Mrs. Shashikala S V, Research Scholar bearing the USN:4BW15PEJ02 has completed her defence on 22nd,March 2021. Research topic was "PERFORMANCE EVALUATION OF BIG DATA CLUSTER USING MULTIPATH TCP" under the guidance of Dr G K Ravi Kumar.









# Three days workshop on "Entrepreneurship Awareness Camp"

Department of Computer Science & Engineering and Information Science & Engineering has conducted three days workshop on "Entrepreneurship Awareness Camp"in association with CSI on 23rd to 25th March 2021. The resource person was Mr.Santosh C Bhoosthali, Technology Specialist VHU Technology, Bengaluru. The students of 7th CSE & ISE have attended.

Entrepreneurship Awareness Camp helps in gaining information and knowledge among faculty and students of Engineering and Science courses on how to start new industries/companies.











# **Events Participated By Students**

Name	USN	Type of the Event	Name of the Event	Date of the Event	Place of the Event
H L ARCHANA	18CSE023	QUIZ	ONLINE QUIZ ON C PROGRAMMING AND PROBLEM SOLVING	01-07-2020	ATMECE, MYSORE
DIVYA KHYANI	4BW17CS022	INTERNSHIP	TEACH FROM HOME	01-07-2020	ONLINE
POOJA K S	4BW17CS044	QUIZ	ONLINE QUIZ ON COMPUTER GRAPHICS AND VISUALIZATION	07-07-2020	BCE,SHRAVANABE LAGOLA
GAYITHRI K	4BW18CS405	QUIZ	ONLINE QUIZ ON COMPUTER GRAPHICS AND VISUALIZATION	07-07-2020	BCE,SHRAVANABE LAGOLA
POOJA K S	4BW17CS044	WORKSHOP	DEVOPS:CONTAINERIZA TION WITH DOCKER	08-07-2020	AMCEC, BENGALURU
KALAVATHI R	4BW18CS408	QUIZ	ONLINE QUIZ ON INTERNET OF THINGS	11-07-2020	CIT, TUMKUR
GREESHMA MS	4BW18CS407	QUIZ	ONLINE QUIZ ON C PROGRAMMING QUIZ SERIES-ADVANCED	14-07-2020	HKBKCE, HASSAN
DIVYA KHYANI	4BW17CS022	CODING COMPETITION	CODE CRUSADE	15-08-2020	SJCIT, CHIKKABALLAPUR
DIVYA KHYANI	4BW17CS022	GROUP DISCUSSION	THOUGHTOMANIA( WON 1st PRIZE)	30-08-2020	IEEE STUDENT BRANCH DIT UNIVERSITY
POOJA D R	4BW17CS043	INTERNSHIP	PINCORE TECHNOLOGIES	01-09-2020	PINCORE, BENGALURU
DEVANGA DHARANI	18CSE019	CODING COMPETITION	CODING BEYOND CURRICULUM	20-09-2020	ONLINE
DIVYA KHYANI	4BW17CS022	PAPER PUBLISHED	AN IMTERPRETATION OF LEMMATIZATIONAN D STEMMING IN NATURAL LANGUAGE PROCESSING	08-10-2020	ONLINE(JOURNAL OF UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY)
DIVYA KHYANI	4BW17CS022	INTERNSHIP	GRADUATE ROTATIONAL INTERNSHIP	19-10-2020	ONLINE
DIVYA KHYANI	4BW17CS022	INTERNSHIP	CONTENT WRITING	01-11-2020	THINK ACT RISE FOUNDATION
H L ARCHANA	18CSE023	WEBINAR	IMAGE PROCESSING- GAIT ANALYSIS AND ITS APPLICATIONS	07-11-2020	BGSIT, BG NAGARA(ONLINE)
DIVYA KHYANI	4BW17CS022	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)
SINCHANA A	18CSE077	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)
MANOJ M R	19CSE042	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)
AKASH K R	19CSE002	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)

THEJASWINI K R	19CSE081	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)
VIBHA B	19CSE086	QUIZ	ONLINE QUIZ	05-01-2021	BGSIT, BG NAGARA(ONLINE)
KEERTHANA V	19CSE036	QUIZ	ONLINE QUIZ	06-01-2021	BGSIT, BG NAGARA(ONLINE)
PRIYANKA V	18CSE059	QUIZ	ONLINE QUIZ	06-01-2021	BGSIT, BG NAGARA(ONLINE)
SINCHANA T S	18CSE078	QUIZ	ONLINE QUIZ	06-01-2021	BGSIT, BG NAGARA(ONLINE)
NISARGA K R	18CSE051	QUIZ	ONLINE QUIZ	06-01-2021	BGSIT, BG NAGARA(ONLINE)
SUHAS V	18CSE080	INTERNSHIP	INTERNSHIP ON ARTIFICIAL INTELLIGENCE	26-01-2021	SMARTKNOWER
DEVANGA DHARANI	18CSE019	QUIZ	ONLINE QUIZ ON CONCEPTS OF DATA STRUCTURES		SKIT, BENGALURU
DEVANGA DHARANI	18CSE019	QUIZ	ONLINE QUIZ ON C PROGRAMMING SKILLS		SKIT, BENGALURU
DEVANGA DHARANI	18CSE019	QUIZ	ONLINE QUIZ ON OBJECT ORIENTED PROGRAMMING		SKIT, BENGALURU

# **Publications by Faculty**

Si no	Name of the Author	Title of the Paper	Name of the Scopus Journal	Year of Publication
1	Dr Ravikumar G K	Secure and Energy-Efficient Data Transmission	Advances in Intelligent Systems and Computing,	2021, 1133, pp. 1311–1322
2	Dr Ravikumar G K	An efficient data masking for securing medical data using DNA encoding and chaotic system	International Journal of Electrical and Computer Engineering	2020, 10(6), pp. 6008–6018
3	Dr Raghavendra B K	Performance evaluation of Map-reduce jar pig hive and spark with machine learning using big data	International Journal of Electrical and Computer Engineering,	2020, 10(4), pp. 3811–3818
4	Dr Shashikala S V	Agribusiness innovation utilizing GIS with machine learning	International Journal of Engineering and Advanced Technology,	2019, 8(6), pp. 2442–2444
5	Siddarth B K	An efficient data masking for securing medical data using DNA encoding and chaotic system	International Journal of Electrical and Computer Engineering	2020, 10(6), pp. 6008–6018
6	Nethravathi H M	Optimal resource sharing amongst device-to-device communication using particle swarm algorithm	Springer Lecture notes data engineering and communications technology	August 2020,volume 53, series editor
7	Amulya M P	Implementation of cryptocurrency wallet tracker system using blockchain technology for real time	International Journal of Advanced Science and Technology	2020, 29(5 Special Issue), pp. 681–688
8	Amulya M P	Coronavirus – COVID-19 before and after solution through web application and app	International Journal of Advanced Science and Technology	2020, 29(5 Special Issue), pp. 27–41