INFO VOICE

Department of Information Science and Engineering

Volume-4   **August 2020 - July 2021**

"Learning gives creativity, creativity leads to thinking, thinking provides knowledge, and knowledge makes you great"

-A P J Abdul Kalam

Vision of the Institute

"To be **center of excellence** recognized **nationally** and **internationally**, in distinctive areas of **engineering education** and **research**, based on a culture of **innovation** and **invention**."

Mission of the Institute

"BIET contributes to the **growth** and **development** of its students by imparting a board based **engineering education** and **empowering** them to be successful in their chosen field by inculcating in them **positive approach**, **leadership qualities** and **ethical values**."

Vision of the Department

"To be the **center of excellence** by adopting technological **innovation** in **academics** and **research** to develop competent **man power** for emerging needs of **society** and i**ndustries."**

Mission of the Department

M1: To provide **quality education** to meet the challenges of technological changes to succeed in their **professional career** and **higher education.**

M2: To inculcate the culture of **research, innovation** and **entrepreneur skills** among the students**.**

M3: To groom our students with the quality of **team spirit, leadership skills** and **ethical values**, to share and apply their knowledge for the **benefit of the society.**

Program Educational Objectives (PEOs):

PEO1- To develop professional skills in students that prepares them for immediate employment and lifelong learning in recent information technology and its related fields.

PEO2 - The ability to cater ever changing technological environments in creating innovative career paths to be an entrepreneur, and a zest for higher studies.

PEO3 - To adopt multidisciplinary approach to analyze and solve real world problems.

PEO4 - To inculcate ethics, communication and team work skills and ability to relate information technology issues with social awareness.

Program Specific Outcomes (PSOs):

PSO1- The graduates of the Program will have solid foundation in the principles and practices of information science, including basics of engineering.

PSO2- The graduates of the Program will be prepared for their careers in the software industry or pursue higher studies and continue to develop their professional knowledge as members of multi-disciplinary teams.

PSO3- The graduates of the program will practice the profession with ethics, integrity, leadership and social responsibility.

The objectives of the newsletter mainly focus on the:

➢ Achievements of the Students and Faculty members from the IS & E department in Curricular, Co-curricular and Extra-curricular Activities.
➢ The Recent trends in the area of Information Science & Engineering and related areas.

About the Department:

The department was established in the year 2000 with an intake of 60 students and it is increased to 120 in the year 2007. The department is equipped with all necessary infrastructure and laboratory facilities. Keeping in view of the vision of the department, the department of ISE is working to achieve excellence in various aspects such as: students' performance, effective teacher-student relationship, imparting quality education to students, motivating faculty and students towards research and imbibing best human qualities in students.

The department has a strong and active Forum INFOZEST helping in all-round development of the students through various Technical Workshops on Recent Technologies like Big Data, Cloud Computing, Python, Android, IoT etc. Extensive placement trainings are conducted to improve employability of the students. The faculty of the department is actively involved in research activities in various technical domains.

The department has recognized by IIT Bombay as one of the remote centre. It uses an ICT enabled process to actually reach out and engage a large number of teachers, and through them, a much larger number of students. The department has established Industry 4.0 Center of Excellence in collaboration with Rovelabs, Bengaluru to adapt itself to the rapid advancements in various specialized fields.

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Assistant Professor

## Message from HOD's Desk:

The entire country stood standstill besides essential services due to lockdown, but education sector articulated its approach swiftly, and was the pioneer in continuing its services and outreach among students/parents and all its stakeholders. It deemed responsibility of the education sector to keep the youth engaged and utilize the time not only for quality education but for self-development. Department of Information Science & Engineering, BIET was also at the forefront in planning & executing things even before closure of institutes. Whatsapp Groups, Google Classrooms were created section-wise before 19th March 2020 and this proved to be a coordinated step towards effective communication and further activities. All faculties were advised to carry their course files, attendance registers and student data to their homes foreseeing the circumstances. The faculty community was prompt in upgrading themselves to new platforms and was experimenting new avenues for sharing instruction material, assessing on theory and laboratory subjects, guiding on projects, clearing the doubts and mentoring students on one hand and interacting with colleagues and outside world on the other hand. All this was accomplished by dedicated, systematic and empathetic efforts of the faculties keeping in mind the safety and security. This special edition of newsletter showcases contribution of faculties and best practices adopted by the Department during tough times of COVID-19 lockdown. With best wishes for healthy and prosperous life ahead.

Dr. Poornima B.
Prof. & Head,
Dept. of IS&E
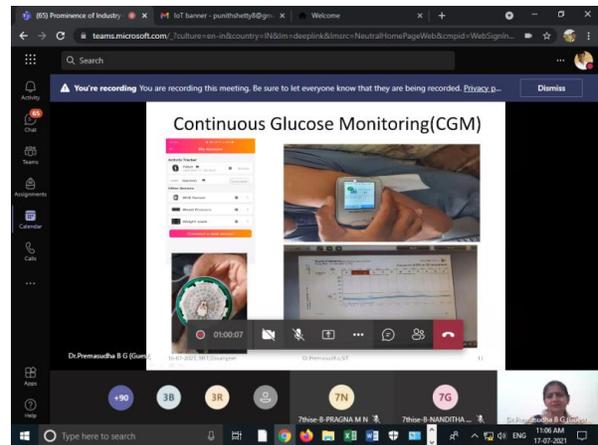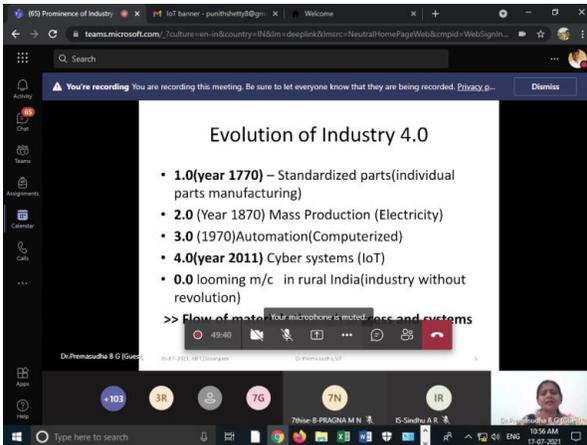
Online Tech Talk on **"Performance of Industry 4.0 in Smart Cities"** by Dr. B G Premasudha, Professor and Head, Department of MCA, Siddaganga Institute of Technology, Tumkur on 17/07/2021.
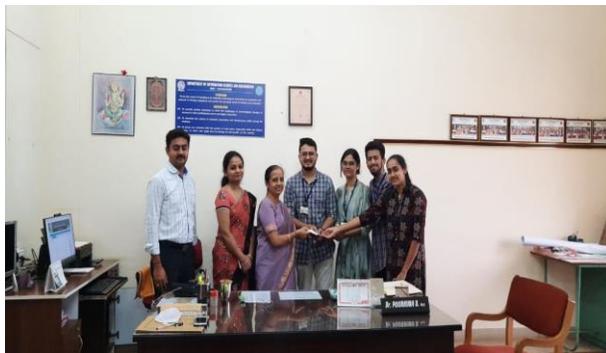
"PRADARSHAN 2021" Online Project Exhibition on 16/07/2021 in association with ISTE Student chapter in presence of Dr. Manoj Kumar M. V. Associate Professor, NMIT, Bangalore.
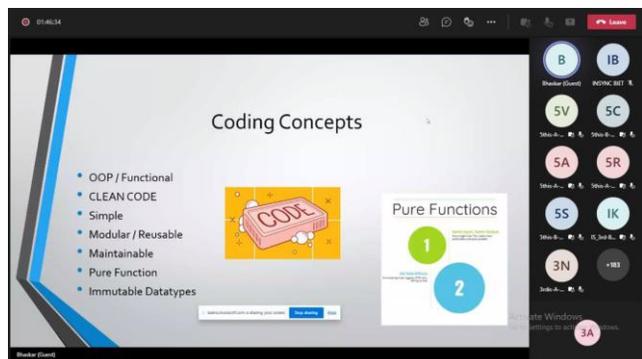
Webinar on **"Full Stack Developer"** by Mr. Bhaskar S Yenecharla, Senior Software Developer, Boeing Ind. Ltd. Bangalore on 23/06/2021in association with IEI.

Parent-Teacher Meeting was conducted for 4th and 6th sem students by Dr. B Poornima, HOD, IS&E Dept. on 22/06/2021.

Bridge course on object oriented concepts (C++) was conducted for 4th sem students during the period 19/04/2021 to 24/04/2021.

On an eve of Women's day celebration a talk on **"Early Detection and Prevention of Cancer in Women"** by Dr. Shashikala P Krishnamurthy Professor and Head of Pathology department, S.S Medical College, Davanagere on 27/03/2021.
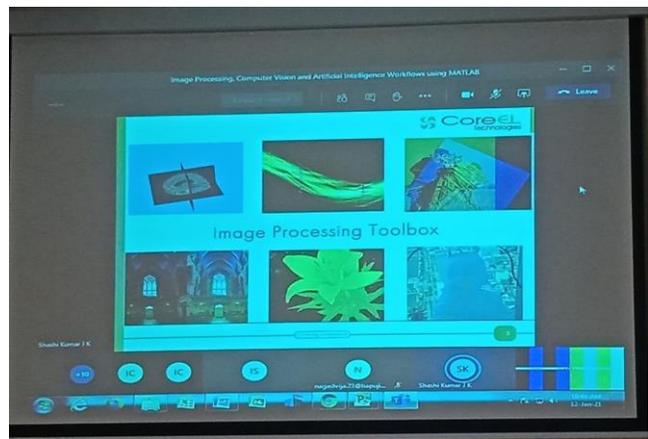
Two days' workshop on "Image Processing, Computer Vision and Artificial Intelligence Workflows using MATLAB" by Mr. Rakshith B S,Senior Application Engineer, CoreEL Technologies, Bengaluru on 12/01/2021 and 13/01/2021.

Three days Faculty Development Program on **"Software Architecture and Design using Sparx Enterprise Architect-Hands on Approach" by** Dr. Sagar B M, Prof & Head, Dept. of IS&E, RVCE and Ms. Rashmi R Assistant Professor, RVCE, Bangalore, from 28/12/2020 to 01/01/2021.

Technical Talk on **"Real world exposure towards working of IT service management (ServiceNow)" by** Mr. Shreenag M Araga, System Engineer, TCS, Bangalore on 30/12/2020.

Workshop on **"Database Application Development"** by Mr. Shreyas Vernekar and Team, Founder and CEO, Rove Labs Pvt. Ltd, Bangalore for 5th sem students from 28/12/2020 to 30/12/2020.

Online Alumni Meet **"RETROUVAILLE-2020"** inaugurated by Mr. Santhosh N M, Senior Engineer, Harman International India Pvt. Ltd., Bangalore on 10/10/2020.

Faculty Publication for the year 2020-21

Sl.No	Title of the Paper	Author Names	Journal	Year of Publication/ ISSN/ISBN No.
1	Structure-preserving NPR framework for image abstraction and stylization	Dr.Poornima B	Springer, Journal of Supercomputer	8445-8513 21 January 2021
2	Structure Preserving Non-Photorealistic Rendering Framework for Image Abstraction and Stylization of Low-Illuminated and Underexposed Images	Dr.Poornima B	ICTACT Journal On Image And Video Processing	Volume 11 Isuue 2, 2021
3	Image-Abstraction Framework as a Preprocessing Technique for Extraction of Text From Underexposed Complex Background and Graphical Embossing Images	Dr.Poornima B	International Journal of Distributed Artificial Intelligence	2021
4	Structure Preserving Image Abstraction And Artistic Stylization From Complex Background And Low Illuminated Images	Dr.Poornima B	Journal On Image And Video Processing	2021
5	A Refined Structure Preserving Image Abstraction Framework as a Pre-Processing Technique	Dr.Poornima B	WSPC Vietnam Journal of Computer Science	2021

6	Evaluation of Activation Functions Based On Their Performances	Dr.Vinutha H P Varsha M Divya M S	Journal of Huazhong University of Science and Technology	1671-4512 April 2021
7	Plant Disease Identification System	Dr.Vinutha H P Hemashree H C Divya M S	Science Technology and Development Journal	0950-0707 May 2021
8	YOLO Algorithm: To Recognize Real Time Vision and Audio	Dr.Vinutha H P Divya M S Sushma C	International Journal of All Research Education & Scientific Methods	2455-6211 May 2021
9	Predictive Model for Rice Blast Disease on Climate Data Using Long ShortTerm Memory and Multi-Layer Perceptron: An Empirical Study on Davangere District	Dr.Vinutha H P Varsha M Dr.Poornima B	Annals of the Romanian Society for Cell Biology Scopus	1583-6258 June 2021
10	Artificial Vision for Visually impaired people using image and speech processing Techniques	Bhuvaneshwari K V	International Research Journal of Engineering and Technology	August 2020
11	A Review On Intervention Of Robots In Mitigating Pandemic Covid-19	Sheik Imran	International Journal of Engineering Development and Research	Sptember 2020
12	Kannada Morphological Analyser and Generator using Natural Language Processing and ML Approaches	Anitha G	Turkish Journal of Computer and Mathematics Education	E-ISSN: 1309-4653 10th May 2021
13	Advancing Morphological Analyser for Kannada Using NLP and Machine Learning Approaches	Anitha G	International Journal of Advanced Science and Technology	2020
14	"Segmentation Algorithms for Dental Caries X-Ray Images."	Jyothi G C	GIS Science Journal, Scopus Indexed, UGC Care Group - II.	Volume 8,Issue 7, ISSN - 1869 – 9391, 2021
15	Ad Hoc Vehicle Networks-Recapitulation and Challenges	Rekha B H	Asian Journal of Computer Science and Technology (SCI)	2021

16	Data Compression over Network using IOT	Puneeth S P	International Journal for Research in Applied Science and Engineering Technology	July 2020
17	A Comparative Study of Ensemble Classifiers for Paddy Blast Disease Prediction Model.	Varsha M Dr. Poornima B	International Journal on Recent and Innovation Trends in Computing and Communication	September 2020
18	Cyberbullying Detection for Twitters	Ranjana B Jadekar Sindhu A R Vinay M T	IJMTST	2455-3778 June-2021
19	ORP measurement of water for on farm water Recycling	Ranjana B Jadekar Sindhu A R Vinay M T	IJARESM	2455-6211 May-2021
20	Translation of brain activity into Commands by using EEG	Ranjana B Jadekar Vinay M T Sindhu A R	Asian Journal of Research in Computer Science.	ISSN:2581-8260 June-2021
21	IOT based anaesthesia machine control using Raspberry Pi	Hemashree H C Sushma C Roopa D E	Journal of Huazhong University of Science and Technology	1671-4512 May 2021
22	Predictive Model for Rice Blast Disease on Climate Data using Long Short-Term memory and Multi-Layer Perceptron : An Empirical Study on Davanagere District	Varsha M Dr Poornima B Dr. Vinutha H P Pavan Kumar M P	Annalsofrscb.ro	1583-6258, Vol.25,issue 6 May 2021
23	Ad Hoc Vehicle Networks: Recapitulation and Challenges	B H Rekha	Asian Journal of Computer Science and Technology	2249-0701,vol.10 no.1, 2021

Faculty participation for the year 2020-21

Name of the faculty	Workshop/ FDP/ STTP / Webinar	Organized by	Date
Dr. Vinutha H. P	Artificial Intelligence	JC, Mysuru in association withATAL	27th to 31st Jan 2021
D. Shivamurthy	Recent trends in machine learning and pattern recognition	GMIT in association with AICTE-IST	6th to 11th Dec 2021
Jyothi G. C.	Block chain Technology	BNMIT, B'lore, in association with ATAL	18th to 22nd Jan 2021
Bhuvaneshwari K. V	Deep Learning Tools & Techniques	KLE, Belagavi.	02nd to 07th Nov 2020
Anitha G.	Wearable Devices	UVCE, Bangalore, in association with ATAL	18th to 22nd Jan 2021
Parveen Banu N.	IoT and its Applications	Sapthagiri College Of Engineering	14th to 18th Dec 2020
Patil N. S.	IoT and its Applications	Sapthagiri College Of Engineering	14th to 18th Dec 2020
Rekha B. H.	Entrepreneurship and Innovation	DSATM, Bangalore	22nd Feb to 06th March 2021
Varsha M.	Principles of AI, ML and Deep Learning	University of Mysore	21st to 25th June 2021
Puneeth S. P.	Entrepreneurship and Innovation	DSATM, Bangalore	22nd Feb to 06th March 2021
Ranjana B. Jadekar	AI, robotics and Animation.	ICT Academy	14th to 18th Oct 2020
Vinay M T	Artificial Intelligence	JC, Mysuru in association with ATAL	27th to 31st Jan 2021
Hemashree H. C.	Recent Trends and Challenges in Image Processing and Computer Vision	AICTE Training And Learning (ATAL) Academy	29th Nov to 03rd Dec 2021
Kamala R.	IoT and its Applications	Sapthagiri College Of Engineering	14th to 18th Dec 2020

Sushma C.	IoT and its Applications	Sapthagiri College Of Engineering	14th to 18th Dec 2020
Manjushree K. R.	IoT and its Applications	Sapthagiri College Of Engineering	14th to 18th Dec 2020
Divya M. S.	Computer Science and Biology (IoT)	BNMIT, B'lore, in association with ATAL	18th to 22nd Jan 2021
Roopa D E	Entrepreneurship and Innovation	DSATM, Bangalore	22nd Feb to 06th March 2021
Dhananjaya G M	Introduction to Cloud	IBM Developer Skills Network	16th to 26th Nov 2021
Sindhu A. R.	Software Architecture and Design using Sparx Enterprise architect tool	BIET Davangere in association with RVCE, Bengaluru	28th Dec 2020 to 1st Jan 2021
Guledal Preetham	Awareness on national institutional ranking	HKBK College of Engg, Bangalore	15th to 19th Feb 2021

Students' participation for the year 2020-21

Placements for the year 2020-21

Number of offers received: 71

75% Placement

Sl. No	Company name	Total number of students placed
1.	Accenture	8
2.	KPMG Pvt. Ltd	2
3.	Technologics Pvt Ltd	1
4.	Infosys	5
5.	iNUBE software solution Pvt Ltd.	8
6.	TCS	7
7.	SLK Software Pvt Ltd	4
8.	Capgemini	3
9.	Cleo Software	1
10.	Wipro	2
11.	COGNIZANT	2
12.	Harman Connected Services	1
13.	Q/JSpiders	5

14.	HCL	5
15.	Pentagon Space	9
16.	Mindtree	2
17.	ALT Digital Technologies	2
18.	Deloitte	1
19.	Aspire Digital Technologies	1
20.	Usha Armour pvt ltd	2