DR.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

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(Affiliated to VTU, Belgaum, Approved by AICTE - New Delhi, ISO 21001-2018 Certified)

NAAC Accredited 'A' Grade

DEPARTMENT OF COMPUTER SCIENCE & ENGINERRING

Zbyte-CPNews 2021 -22

PRESIDENT MESSAGE

It is indeed a proud moment that the Computer Science and Department has initiated to bring out its Fourth edition of "Zbyte-CP". I would like to see very active student participation and also more activities to be covered in the coming editions. I wish all students to excel in the coming examinations. I wish this newsletter to continue and attain the heights of excellence. My best wishes to everyone associated with this newsletter, and special thanks to the editorial team.

FROM PRINCIPAL DESK

It gives me immense joy to share that "Zbyte-CP" is doing very well. I appreciate the hard work of all students, faculty and whole heartedly thank them for presenting the Fourth edition of Newsletter in a very informative and attractive way. This Newsletter consists of various articles on current trends meticulously curated by our editorial team. We hope it will inspire you and enrich you with practical knowledge in the field of Computer Science and Engg. Once again, deepest gratitude to everyone for making the newsletter a great source of learning.

AT A GLIMPSE

Webinar / FDP Attended

E-Quiz and Webinar Conducted

Publications

Faculty Achivements

Students Achivements

PATRONS

Dr. T Venkat Vardhan

President, GVET

Sri. Raoul Kengal Vardhan

Vice President, GVET

Dr. Sved Ariff

Principal, Dr. TTIT

EDITORIAL BOARD

Prof. Hamsalatha

Assistant Professor

HEAD OF THE DEPARTMENT

Dr. S Sreedhar Kumar

Professor & HOD

ABOUT THE DEPARTMENT

The department of Computer Science and Engineering (CSE) was established in the academic year of 1988 with an intake of 60 and further enhanced to 90 seats in BE. The department has well equipped laboratories with updated software and hardware with an emphasis on practical learning in addition to curriculum. The department has well qualified and experienced faculties having extensive expertise and experience in their chosen fields. Faculties are actively involved in research in core areas of Computer Networks, Cloud Computing, Image Processing, Machine Learning, Data Mining and Artificial Intelligence.

The department endorses Industry-Institute Interactions under a governed MHRD's IIC. Department is associated with pioneer industry players like, TCS under CSR scheme for TCS-IT Employability Program since 2016, CISCO Networking Academy and Red Hat Academy for global certification in-campus touching beyond the syllabus limits. A well-furnished and established training and placement facilities are provided under various firms like Seventh Sense, FACE Academy and regular assessments are assessed from AMCAT and CoCUBES, for the year 2017-18 and 18-19, the Training and Placement department has offered 80+ placement opportunities and support to students in various MNC companies such as TCS, Accord, Wipro, Infosys, Mphasis, Tech Mahindra and many with a success rate of 75% students landing in jobs, 20% of Higher studies and rest as entrepreneurs.

The department is recognized under the MHRD established institutional level's Institute Innovation Council (IIC) since November 2018 by Govt. of India. The IIC encourages students and faculties to emerge and innovate recent developments in research and technology. The department has organized two national level conferences and one international level conference (ICRTTEAS - 2019) and the research outcomes are streamlined and published under various peer reviewed journals. The department's contribution in research and publications is recorded and archived in various prestigious indexing services such as Science Citation Index (SCI), Web of Science (WOS) and SCOPUS. The publications are supported and published by IEEE , Springer Nature , WILEY , Elsevier and Inderscience.

VISION OF THE DEPARTMENT

"To produce highly competent and innovative Computer Science professionals through excellence in teaching, training and research."

MISSION OF THE DEPARTMENT

- > To provide appropriate infrastructure to impart need-based technical education through effective teaching and research.
- > To involve the students in innovative projects on emerging technologies to fulfill the industrial requirements.
- > To render leadership skills and ethical responsibilities in students that leads them to become globally competent professionals.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

- **PEO 1:** To succeed in computing industry through effective analysis, design and development skills.
- **PEO 2:** To Acquire new skills to work in multidisciplinary areas with strong focus on innovation and entrepreneurship.
- **PEO 3:** To collaborate as team members and team leaders with ethics and good communication skills.

PROGRAM SPECIFIC OBJECTIVES (PSO)

PSO1: To design and apply standard practices and strategies in software project development to sole real world problem.

PSO2: To adapt to the future technology, to fill the research gap and become entrepreneurs.

WEBINAR / FDP ATTENDED

- ➤ Organized four days national level online workshop on "Real Time Applications on Artificial Intelligence, Machine Learning and Big Data Analytics (RTAAIMLBDA-D21)" in the association with CSI Student Branch and IIC Cell of DrTTIT from 15th to 18th Dec 2021.
- ➤ Organized three days national level online workshop on "Real Time Applications on Network Security Using NS2 –(RTANS-NS2)" in the association with CSI Student Branch and IIC Cell of DrTTIT from 29th to 31th Dec 2021.
- ➤ Organized six days national level workshop on "Intermediate Code Generation & Web Technology Application-(ICGWTA-J2022)" in association with CSI Student Branch and IIC Cell of DrTTIT from 27th June to 1st July 2022.
- ➤ Department of Computer Science & Engineering, Dr.T.Thimmaiah Institute of Technology, KGF organized a virtual workshop on "Business Model Canvas" on 25.04.2022 by Mr. Nikhil Kulkarni Incubation Manager at KCIIL-KBCNMU Jalagoan, Maharashtra.

E-QUIZ AND WEBINAR CONDUCTED

- > Dr. S Sreedhar Kumar has participated in the four days national level workshop on "Real Time Applications on Artificial Intelligence, Machine Learning and Big Data Analytics (RTAAIMLBDA-D21)" organized by Department of CSE, DrTTIT in the association with CSI Student Branch and IIC Cell of DrTTIT from 15th to 18th Dec 2021.
- ➤ Dr. S Sreedhar Kumar has participated in the three days national level online workshop on "Real Time Applications on Network Security Using NS2 –(RTANS-NS2)" in the association with CSI Student Branch and IIC Cell of DrTTIT from 29th to 31th Dec 2021.

- Dr. S Sreedhar Kumar has participated in the two days national level FDP on "Pedagogy of Research Writing" organized by KhandelwelVaish Girls Institute of Technology, Jaipur, from 3rd to 4th Dec 2021
- ➤ Dr. S Sreedhar Kumar has participated in one week national level FDP on "**Python**" organized by E & ICT Academic, IIT Kanpur, India, from 14th to 19th March 2022.
- ➤ Prof. Tharadevi, Prof. Punitha & Prof. Prema Latha, has participated in Five Days Workshop on "SCILAB and XCOS-FOSS for MATLAB" conducted ATAL
- ➤ Prof. Tharadevi, Prof. Punitha & Prof. Prema Latha, has participated in Five Days Workshop on "Computer Science and Biology" conducted ATAL
- ➤ The entire faculty member from the department of CSE had participated in 6 days national level workshop on "Intermediate Code Generation and Web Technology "for six days from 27.06.2022 to 2.8.2022 by Prof Rajath A N Asst. Prof Department of CSE GSSSIETW and Prof Sowmya Asst. Prof Department of CSE GSSSIETW.
- Prof Sangeetha V has participated in 5 days National level workshop on "Designing and Modeling of IoT, AI and ML" conducted by AICTE.
- Prof Shalini G had participated in a 6 days virtual workshop on Location Tracking for internet of things by NPTEL in association with IIT Madras
- Prof. Sharmila Kumari N has participated in the Virtual session on "Prototype/Process design and development by maker space a place for creativity, innovation and product development on May 5th 2022.
- ➤ Prof. Sharmila Kumari N also completed a three days workshop on IOT from 11th -13th Feb 2022 organised by the IEEE student's branch.
- ▶ Prof. Sharmila Kumari N participated in One Day Online Workshop on "How to Write Research paper & Publication of Paper" on June 25th 2022.

Hackathon

First one day intra college technical and non technical Hackathon with entitle "PetaByte-J22" in association with DrTTIT CSI Student Branch and Institute Innovation Council (IIC) cell of DrTTIT, which was held on 10.1.2022 in our college student center.





Department of CSE has organized 1st One Day Intra College Technical and Non Technical Hackathon with the title "PetaByte-J22" in association with DrTTIT CSI Student Branch and Institute Innovation Council (IIC) cell of DrTTIT, which was held on 10.1.2022 in our college student center and it t was inaugurated by Chief Guest Mr. S V Giri, Deputy General Manager (HR), Center of Excellence, BEML Limited, KGF, Karnataka.

PUBLICATIONS

- ▶ Dr. S Sreedhar Kumar , has published his research paper with entitle "Real Time Investigation Model on Unstructured Oncological MR Image Cluster Identification Using Different Improved Unsupervised Clustering Technique", Computer, Materials & Continua, Indexed in SCI, Impact Factor: 4.853, ISSN: 1546-2226, Accepted on 10 Dec 2021
- ➤ Dr. S Sreedhar Kumar , has published his research paper with entitle "Two Phase Cluster Validation Approaches Towards Measuring Cluster Quality in Unstructured and Structured Numerical Datasets", Journal of Ambient Intelligence and Humanized Computing (Springer), vol.12, pp. 7581–7594, Indexed in SCI, Impact Factor: 7.04, ISSN: 1868-5145, Jan 2021.
- ▶ Dr. S Sreedhar Kumar , has published his research paper with entitle "Comparative Study of Feature Extraction Using Different Transform Techniques in Frequency Domain", Advances in Automation, Signal Processing, Instrumentation and Control, Springer LNEE, vol. 700, pp. 2835-2846, Indexed in **Scopus**, March 2021.
- ➤ Dr. S Sreedhar Kumar has published his research paper with entitle "Real Time Investigation Model on Unstructured Oncological MR Image Cluster Identification Using Different Improved Unsupervised Clustering Technique", in the journal of Computer, Materials & Continua (Tech

- Science Press), vol. 72, no. 1, pp. 281-299, Indexed in SCI, Impact Factor: 4.853, ISSN: 1546-2226, Feb 2022
- ▶ Dr. S. Sreedhar Kumar, "An Improved Technique for Identifying Fake News on Social Media Network Using Supervised Machine Learning Concepts", 2022 IEEE World Conference on Applied Intelligence & Computing (AIC 2022), Indexed in Scopus, Rajkiya Engineering College, Sondhadra, Indai, 17th – 19th June 2022

Patent Filed & Grant

- ➤ Dr. S Sreedhar Kumar , has filed, published and got grant his idea in Germany patent (Deutshes Patent-Und Markenamt) with entitle "An Improve Video Retrieval System" on 25.1.2022 with reference http://www.dpma.de/service/e dienstleistungen/dpmadirekt/index.html
- ➤ Dr. S Sreedhar Kumar , Prof. Vinutha, Prof. Nishabai, Prof. Sophia, Prof. Sangeetha V and Prof, Velantina have jointly filed and published their idea in Indian patent (IPI) with entitle "Two Level Intelligent Clustering System for Robotically Identifying Imitation Images in Large Image Set" on 18.3.2022 with reference http://ipindia.nic.in/writereaddata/Portal/

Paper Presented @ International Conference by Faculties

Dr. S Sreedhar Kumar, has presented his research paper with entitle "ImprovingMedical Image Pixel Quality Using MICQ Unsupervised Machine Learning Technique", International Conference on Computing, Communications & Cyber Physical System", Reva University, Bangalore, 18th – 19th November 2021.

INDUSTRIAL VISIT



Organized one day industrial visit for 2^{nd} , 3^{rd} and 4^{th} years with 200 students and 8 faculty members to BEML, KGF, Karnataka during on 12-12-2021.

FACULTY ACHIVEMENTS

- ➤ Dr. S Sreedhar Kumar , has submitted funding research project proposal with entitled "An Improved System for Video Retrieval From Large Video Set Through Image Key Frame Using Improved Machine Learning Concepts" with budget (Rs. 14.50L) to VTU Karnataka, Research Grants Scheme 2021.
- > Dr. S Sreedhar Kumar , has submitted funding research project proposal with entitled "An Investigation of Effectively Utilizing the Memory Space in Various Systems for Identifying and

Ignoring Highly Replicated Images Over the Large Image Set Using Multilevel Improved Unsupervised Clustering Techniques "withbudget (Rs. 14.50L) to VTU Karnataka, Research Grants Scheme 2021.

- ➤ Prof. Leelavathy, has filed a patent with entitle" Intelligent system and method for tracking personal financial data based on block chain" on 20/09/2021 and the same was published on 22/10/2021.
- > Prof. Velantina V Secured 2nd Rank in the M.Tech VTU examination 2021-2022.
- Prof. Preethi S has completed her course work and Literature survey (Blockchain in Deep Learning Technology) in PhD in Karunya Institute of technology.
- ▶ Prof. Sharmila Kumari N has completed her Course Work in PhD (Internet of Things) at UVCE, Bangalore University.
- ▶ Prof. Shalini G has registered for PhD at Amrita Viswa Vidyapeetham, Bangalore.
- Prof. Apoorva D has registered for PhD at VTU in Machine Learning.
- ▶ Prof. Sangeetha V has acquired the educator certificate from Eduskills in the field of Cloud Foundations.

STUDENTS ACHIVEMENTS



Mr. Danush, $3^{\rm rd}$ year student has won first prize in the solo dance competition in "Technical & Cultural Hackathon", organized by Department of ECE and EEE, DrTTIT in the association with IETE Chapter, Bangalore during on 30.10.2021

Students Achievements

In Academic:

Odd Semesters VTU Exam Result (May 2022)

Year	Semester	Number of Students	Number of Students	Students Pass
		Appeared	Pass	in %
2nd	3rd	82	47	57.32
3rd	5 th	105	75	71.42
4th	7th	73	67	91.78
	7 th Exit Scheme	9	9	100

Students registered for Honors Degree From VTU

- Dhasrshini NPTEL Courses(7)
- ➤ Nizba Igra- NPTEL Courses (7)
- Dhanush R -NPTEL Courses (5)
- ➤ Mohammed Akhil NPTEL Courses (5)
- ➤ The above students had completed many courses offered from the **National Programme on Technology Enhanced Learning.** And have applied for the honors degree from VTU in Computer Science and Engineering.
- ➤ 105 students were participated in National Level workshop on "Intermediate Code Generation and Web Technology" which held from 27th June to 1st July 2022.

In Sports

> Students from the Department of Computer Science and Engineering Dr T Thimmaiah Institute of Technology had participated in the intra College Cricket Tournament and thrived as the winners.



Students of CSE cricket team has won the winner cup in the DrTTIT Intra College Cricket Competition (2021-2022) which organized by DrTTIT during period from Jan2022 to Feb2022.

In Other Activities







Several activities viz., Painting Non technical competitions were carried out to encourage the students to enhance their skills apart from the academics.