DR.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Estd. 1986) Oorgaum, Kolar Gold Fields, Karnataka – 563120,

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

NAAC Accredited 'A' Grade

DEPARTMENT OF COMPUTER SCIENCE & ENGINERRING

Zbyte-CPNews 2022 -23

PRESIDENT MESSAGE

It is indeed a proud moment that the Computer Science and Department has initiated to bring out its Fifth 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 Fifth 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. Syed Ariff

Principal, Dr. TTIT

EDITORIAL BOARD

Prof. Divya Shree V

Assistant Professor

HEAD OF THE DEPARTMENT

Dr. SreedharKumar

Associate Professor

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 learningin 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 researchin 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 solve real world problem.

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

WEBINAR / FDP ATTENDED

- Dr. Sreedhar Kumar S and All Faculty members of CSE Deprtment has participated in the six days days national level virtual workshop on **"Real time application for Block chain and IOT (RTABC & IOT N22)"** in the association with CSI Student Branch and IIC Cell of DrTTIT from 6th to 11th November 2022.
- Dr. Sreedhar Kumar S and All Faculty members of CSE Deprtment has participated in the five days national level virtual workshop on **"Aspects on Computer Networks, Database Applications Development & Turing Machines 2022-2023"** in association with CSI student branch and IIC cell of DrTTIT, KGF from 6th to 10th December 2022.
- Dr. Sreedhar Kumar S and All Faculty members of CSE Deprtment has participated in the three days national level virtual workshop on on **"Cloud Computing And It's Industrial Application's "** in association with CSI student branch and IIC cell of DrTTIT, KGF from 27th to 29thApril 2023.
- Dr. G Kharmega Sundararaj, attended the Five Days National Level Workshop on **"Fundamental Concepts Of Computer and Logic Design"** organized by Department of CSE in association with CSI student branch and IIC cell of DrTTIT, KGF from 9th to 13thJan 2023.
- Dr. G Kharmega Sundararaj, attended the Five Days International Virtual FDP on **"Personality Grooming Handling Stress and Emotional Intelligence"** organized by IQAC and Department of Commerce with information Technology of PPG college of Arts and Science ,Combinatore,Tamil Nadu from 2nd to 6thJan 2023.
- Prof .Sophia S has participated and successfully completed the 5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 22 May to 26 to May 2023.

E-QUIZ AND WEBINAR CONDUCTED

➤ Department of CSE has organized five days national level virtual workshop for students and faculty members with entitle **"Real Time Application for Block Chain and IOT (RTABC & IOT N22)"** in association with CSI Student Branch and IIC Cell of DrTTIT from 6th to 11th of November 2022 including two resource persons namely Dr. R. Uma Mageswari, Associate Professor, Department of CSE, VardhamanCollege of Engineering, Hyderabad and Dr. Shanthi Makka, Professor, Department of CSE, Vardhaman College of Engineering, Hyderaba**d** have presented their respective topics in this workshop.

➤ Department of CSE has organized five days national level virtual workshop for students and faculty members with entitle **"Aspects on Computer Networks, Database Applications Development & Turing Machines "** in association with CSI Student Branch and IIC Cell of DrTTIT from 6th to 10th of December 2022 including three resource persons namely Dr.K.Thirumoorthy, Assoc.,Prof.,Dept.of CSE, MepcoSchlenk Engineering College,TN, Dr.N.Umakanth,Asst .Prof.,Dept CSE MepcoSchlenk Engineering College,TN, Dr.B.SelvaKumar,Asst.Prof.,Dept of CSE, Mepco Schlenk Engineering College, TN they have presented their respective topics in this workshop.

➤ Department of CSE has organized Three days national level virtual workshop for students and faculty members with entitle **"Cloud Computing And It's Industrial Application's"** in association with CSI Student Branch and IIC Cell of DrTTITfrom 27th to 29th of April 2023 including two resource persons namely Dr. Dr. Jayasimha S R, Assistant professor, Department of MCA, RV College of Engineering, Bangaloreand Prof. John Bennet Assistant Professor, Department of CSE,Presidency University,Bangalorehave presented their respective topics in this workshop.

➤ Department of CSE has organized five days national level virtual workshop for students and faculty members with entitle **"Recent Trends on IT Industry"** in association with CSI Student Branch and IIC Cell of DrTTIT from 20th to 24th of June 2023 including five resource persons namely Dr. Manju Prasad B, Associate Professor,Department of ISE, GSSSIETW, Mysore, Dr. Meenaksh iMalik, Assistant Professor(Selection Grade),Departmen to CSE, The North Cap University, Gurugram, Dr.A.Rehash Rushmi Pavitra, Associate Professor, Department of AI and DS, Sri Sai Ram Engineering College, Chennai, TN, Dr. R. Saravanan, Professor & Head Department of CSE,Vel Tech Multi Tech Dr.Rangarajan & Dr. Shakunthala Engineering College, Chennai, TN , Dr. D. Stalin David, Associate Professor Departmentof IT, VelTech Multi Tech,Dr. Rangarajan & Dr.Shakunthala Engineering College, Chennai,TN they have presented their respective topics in this workshop.

PUBLICATIONS

➤ **Dr. Sreedhar Kumar S** has published his research manuscript with entitle **,"An Approach For Improving MR Image Pixel Quality Using Unsupervised Clustering Methods "**,Malaysian Journal Of Computer Science ,Indexed In **Scopus & Q4** , pp. 53-64, Impact Factor : 6th Dec 2022.

- The faculty members **Dr. Sreedhar Kumar S, Prof. Velantina V, Prof. Nishabai and Prof. Sangeetha** have joined together and published their research article with entitle "**An Intensified System for Identify Distinct Clusters over the Video using Improved Semi-Supervised Clustering Technique**", Procedia Computer Science (Elsevier), Indexed in Scopus , Impact factor :0.64,ISSN :1877-0509, Dec 2022.
- **Dr. Sreedhar Kumar S** has published his research manuscript with entitle,**"An Approach For Improving MR Image Pixel Quality Using Unsupervised Clustering Methods "**,Malaysian Journal Of Computer Science ,Indexed In **Scopus & Q4** , pp. 53-64, Impact Factor : 6th Dec 2022.
- Prof . Preethi S has published her research paper with entitle "**Deep Learning with Blockchain Technology for Secure Data Management in Healthcare Sector using Hybrid Elliptic Curve-Rivest–Shamir–Adleman Cryptography**", Cybernetics and Systems An International Journal,Vol no. 53, Issue 8 (2022).

Paper Presented @ International Conference by Faculties

- Dr. G Kharmega Sundararaj, has Presented Paper titled **"Hybrid Approach For of Classification of Cardiac Arrhythmia Using Machine Learning Techniques"** under Track during 5th International Conference on Recent Trends in Technology, Engineering and Applied Science (ICRTTEAS-2023) held on 19th and 20th May 2023.

INDUSTRIAL VISIT

- The Department of CSE has organized two days industrial visit for final year 7th semester students along with the staff members Dr. G Kharmega Sundararaj, Mrs. Sumalatha and Mr. Nandhakumar respectively and they are visited two IT industries in Chennai namely **Imarticus Learning Pvt Ltd and KaaShiv Info Tech respectively from 8th and 9th of December 2022.** Mr. Bharani Kumar, Senior Manager from Imarticus Learning Pvt Ltd and Mr. J. Venkatesan Prabu, Managing Director KaaShiv from Info Pvt Ltd , Chennai respectively they have presented their companies activities and product details to students.

Figure 1: Department of CSE has organized Two Days Industrial Visit for Final Year 7th Semester Students to IT Industries in Chennai from 8th to 9th of December 2022 with 50 Students and Three Teaching and Non Teaching Staff Members

FACULTY ACHIVEMENTS

- **Dr. Sreedhar Kumar S,** Hod of CSE Department has Achived Best Paper Certificate, Paper Titled "An Automatic Object Detection System for Motor Bikes to Avoid Accident Using Improved Machine Learning Technique", authored by Dr. Sreedhar Kumar S, Professor of DrTTIT, KGF has been chosen as the Best Paper in CSE track, presented in the 5th InternationalConference on Recent Trends in Technology, Engineering and Applied Science -ICRTTEAS 2023 held virtually on 19th & 20th May 2023.

- **Dr. Sreedhar Kumar S,** Hod of CSE Department has Achived Best Paper Certificate, Paper Titled "An Automated Medicated System for Rural People to Provide Medication Without Human Interpretation Using Machine Learning Technique",authored by Dr. Sreedhar Kumar S, Professor of DrTTIT, KGF has been chosen as the Best Paper in CSE track, presented in the 5th InternationalConference on Recent Trends in Technology, Engineering and Applied Science -ICRTTEAS 2023 held virtually on 19th & 20th May 2023.

- **Dr. Sreedhar Kumar S,** Hod of CSE Department has Achived Best Paper Certificate, Paper Titled "Cardless ATM system using IRSI Scan",authored by Dr. Sreedhar Kumar S, Professor of DrTTIT, KGF has been chosen as the Best Paper in CSE track, presented in the 5th International Conference on Recent Trends in Technology, Engineering and Applied Science -ICRTTEAS 2023 held virtually on 19th & 20th May 2023.

- Dr. G Kharmega Sundararaj Advisory Committee Member in **"First International Conference on Communication , Computing and Internet of Things"** 21st March 2023 Sri Vidya College of Engineering & Technology, Virudhu nagar, Virudhu nagar District, Tamil Nadu, India.

- Prof. Preethi S has published 2 papers (Blockchain in Deep Learning Technology) in PhD at Karunya Institute of technology.

- Prof. Sangeetha V has registered for PhD at Reva University, Bangalore.

- Prof .Thara Devi M & Prof .Divya Shree V has achived 100% result in SAN 8thsem.

- ➢ Prof .Shalini G has Completed NPTEL Online Certificate in Cloud Computing (Jan-April 2023).
- ➢ Prof .Sophia S has participated and successfully completed the 5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 22 May to 26 to May 2023.

Eduskil virtual Internship :
- ➢ Prof. Sangeetha and Prof. Sophia completed AWS Academy Cloud foundations Educator training program.
- ➢ Prof. Preethi S completed Blue Prism Educator Academy Program in RPA.
- ➢ Prof.Thara Devi M completed Cyber Security Educator Training Program.

STUDENTS ACHIVEMENTS

In Academic:

Even Semesters VTU Exam Result (November 2022):

Year	Semester	Number of Students Appeared	Number of Students Pass	Students Pass in %
2nd	4th	79	57	70
3rd	6th	103	81	78
4th	8th	72	72	99

Odd Semesters VTU Exam Result (June2023):

Year	Semester	Number of Students Appeared	Number of Students Pass	Students Pass in %
2nd	3rd	102	58	57
3rd	5th	82	57	56
4th	7th	103	84	81
4th	8th	102	100	98

- • 98 students completed virtual Internship provided by Eduskil cohort4 during December 2022 - February 2023
- ➢ Cloud Virtual Internship - 44
- ➢ AI-ML Virtual Internship - 18
- ➢ Cyber Security Virtual Internship - 20
- ➢ Process Mining Virtual Internship - 11
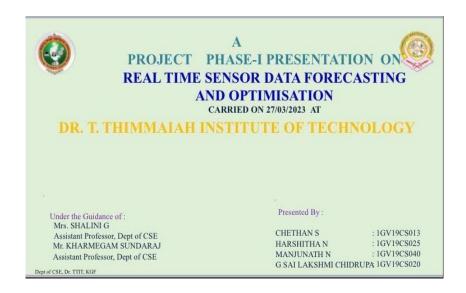- ➢ Robotic Process Automation - 05

Project Expo

Figure 2:Our 8th Sem students had won 1st and 2nd prize in Project Expo.

In Sports:

- Students from the Department of Computer Science and Engineering Dr T Thimmaiah Institute of Technology had participated in the VTU Basket Ball Tournament.

Figure 3 : Students of CSE basket ball team has participanted in the DrTTIT VTU Basket Ball Tournament (2022-2023) which organized by DrTTIT during period from Oct 2022 to Nov 2022.

In Other Activities:

Our 3rd/B semester student Mr. Vishwas K P has participated in **26th National Karate Event 2022 held at Gurugram, Haryana** and won award with entitle "**National Sport Karate Championship"** which organized by Ashish Martial Arts Academy, Karnataka during period from **1st to 4th of December 2022.**

Figure 4: Our 3rd semester student Mr. *Vishwas K P* has participated and won award with entitle "National Sport Karate Championship" in 26th National Karate Event 2022 held at Gurugram, Haryana which organized by Ashish Martial Arts Academy, Karnataka from 1st to 4th of December 2022.