

NEWS LETTER

Department of Computer Science & Engineering

TECH TIMES

A Half- Yearly Newsletter

Jan 2023

“The computer was born to solve problems that did not exist before.”
— Bill Gates

**PRASAD V. POTLURI SIDDHARTHA
INSTITUTE OF TECHNOLOGY**

Department of Computer Science & Engineering

EDITORIAL BOARD

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The Department of Computer Science and Engineering was formed in the year 1999. The department has started B.Tech program with an initial intake of 40 in the year 1999 and 120 from 2007 onwards. The department has also started M.Tech program with an initial intake of 18 in the year 2006, and an increase in the intake to 36 in the year 2011. The department is accredited by NBA in the year 2007 for a period of 3 years and was reaccredited in the year 2012 for a period of 2 years. In 2019 department was accredited for a period of 3 years.

The department has 37 qualified teaching staff with 11 PhDs and 26 M.Techs. Our faculty members aim at delivering top class education blending their rich research experience with class room teaching. The entire faculty is involved in research activities and has published/presented papers in national and international journals and conferences.

The department has ACM student chapter and CSI student chapter. The department offers various certification training programs to students like APSSDC Mobile App Development Program to make the students well prepared to face the industry. The department has also established Intel FICE Lab to encourage students with new technologies.

Guest Lectures / Workshops / Co-curricular events organized by Department

The department of Computer Science and Engineering organized ---

1. “Acheivers Day-2022” to felicitate the parents of the students who got high package placements on 16-07-22. The following students and their parents were felicitated:

S.No.	Roll No.	Name	Company	Package
1.	18501A0574	Mr. M. Veeranna	Amazon	44 LPA
2.	18501A0586	Ms. N.Sri Durga	Amazon	44 LPA
3.	18501A0581	Mr.M. Abhinav	Amazon	44 LPA
4.	18501A05B8	Ms.V.Priyanka	Walmart	20 LPA
5.	18501A05A4	Ms. S. Samyuktha	Wells Fargo	20 LPA
6.	18501A0542	Mr. G. Sankar Sai	Ivanti	12 LPA
7.	18501A0554	Ms. K.Vigneswari	HSBC	9LPA
8.	18501A05A1	Sk. Sana	HSBC	9LPA



Fig.1: “Acheivers Day-2022” to felicitate the parents of the students who got high package placements on 16-07-22.

A Success Meet for Smart India Hackathon Winners on 29-8-2022. Shri. P. Lakshmanrao, secretary, Shri. S. Venkateswara Rao, Treasurer Siddhartha Academy, Dr K Sivaji Babu, Principal, PVPSIT,

Dr. Jagadish Vengala, Convenor, Innovation Council and Dr A Jaya Lakshmi ,HOD, CSE appreciated the efforts of the students and congratulated them.



Fig.2: A Success Meet for Smart India Hackathon Winners on 29-8-2022.

2. Three Day Workshop on "Android Development with Kotlin" for III B.Tech students from 26-8-2022 to 28-8-2022. **Resource Person:** Mr Akhil Battula, Android Engineer, Titan, Hyderabad. **Coordinators:** Ms. D. Sree Lakshmi, Ms. Deedepya

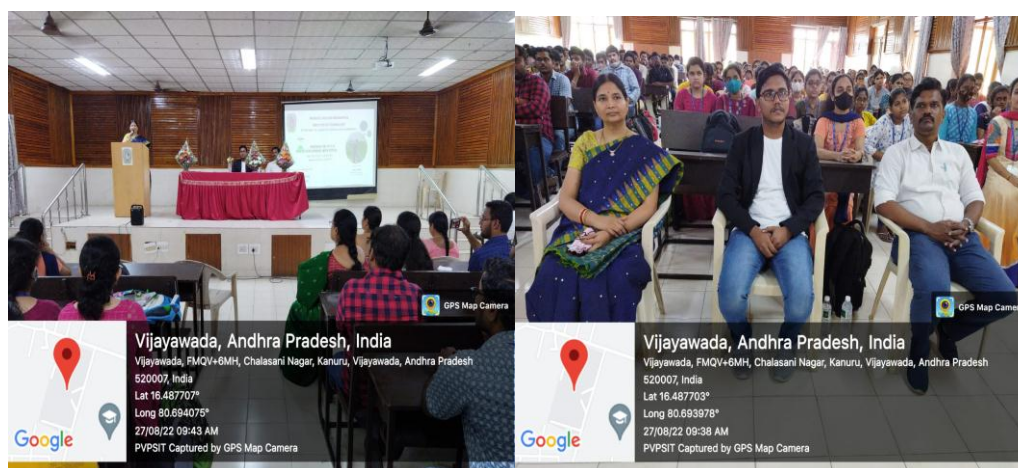


Fig.3: Three Day Workshop on "Android Development with Kotlin" from 26-8-2022 to 28-8-2022

3. Guest Lecture on “Industry Readiness” for IV B.Tech students on 8-8-2022. **Resource Person:** Dr. P.E.S.N.Krishna Prasad, Professor & HOD, Department of CSE, ANITS college of Engineering, Visakhapatnam.



Fig.4: Guest Lecture on “Industry Readiness” for IV B.Tech students on 8-8-2022 by Dr. P.E.S.N.Krishna Prasad, Professor.

4. **Idea Presentation Contest** for II, III, IV B.Tech students in association with ISTE student chapter on 15-8-2022. **Coordinator:** Dr. M. Sailaja, Asst. Professor, Dept. of CSE. **Judges:** Dr. S. Madhavi, Professor, Dept. of CSE. Dr. P. Sai Kiran, Professor, Dept. of CSE. **Participants: 10 teams**

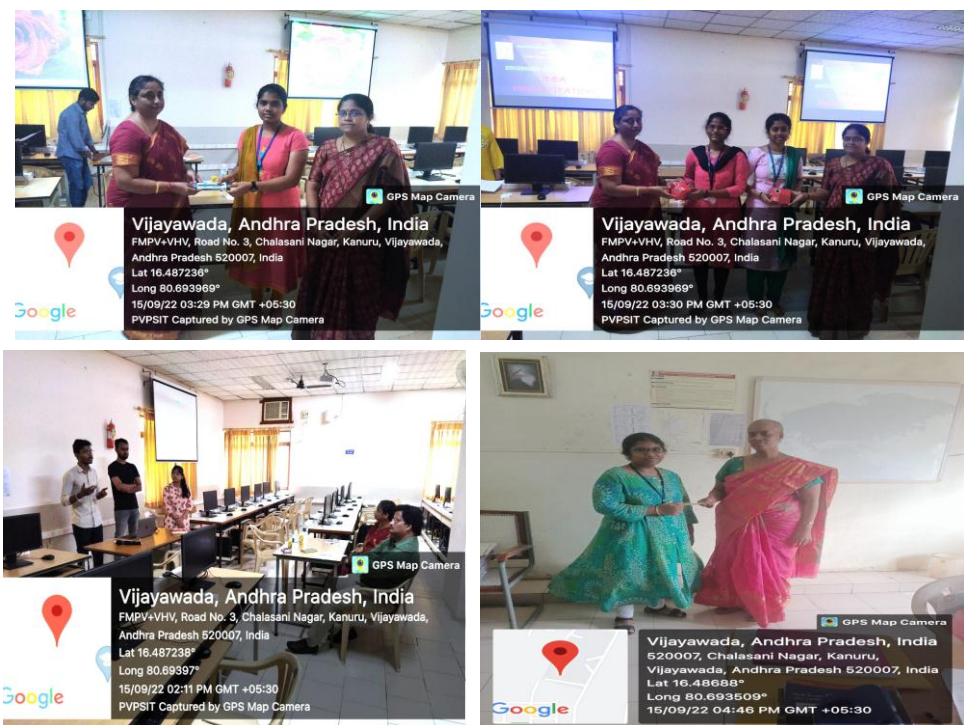


Fig.5: Idea Presentation Contest in association with ISTE Student chapter on 15-8-2022

5. **Team Quiz** for II, III, IV B.Tech students in in association with ISTE student chapter on 16-8-2022. **Coordinator:** Dr. M. Sailaja, Asst. Professor, Dept. of CSE. **Judges:** Dr. R. Daniel, Assoc. Prof., Dept. of CSE. Dr. G. Lalitha Kumari, Sr.Asst. Professor, Dept. of CSE. **Participants:** 30 teams



Fig.6.: In association with ISTE Student Team Quiz was conducted on 15-8-2022

6. **Speak Out** Contest for II, III, IV B.Tech students in association with ISTE student chapter on 16-8-2022. **Coordinator:** Dr. M. Sailaja, Asst. Professor, Dept. of CSE. **Judge:** Dr. Sk. Rehna, Asst. Professor, Dept. of FE. Mr. M. Krishna, Asst. Professor, Dept. of FE. **Participants:** 19 members



Fig.7.: In association with ISTE Student Speak Out contest was conducted on 15-8-2022

7. One week workshop on " Mobile Application Development using Flutter" for from 16-8-2022 to 22-8-22. Resource Person: Rajavarapu Yaswanth Kumar, Shris info-Tech, Program Analyst, Hyderabad. Coordinator: Mr. B. Vishnu Vardhan, Asst. Professor, Dept. of CSE
8. A Seminar on "Swavalambi Bharath Abhiyan" for II CSE students on 16-9-2022.



Fig.8: Seminar on "Swavalambi Bharath Abhiyan" for II CSE students on 16-9-2022.

- Resource Persons: 1. Dr S.Linga Murthy, Assistant Professor, Department of Economic studies and planning, Central University of Karnataka, Kadaganchi, Karnataka. 2. Mr S.Narasimharaju, Convenor, Swadesi Jagran Manch. Coordinator: Ms. A. Divya, Asst. Professor, Dept. of CSE.
9. Online Faculty Development Programme & Student Workshop on Block chain Technology in association with Academic Interface Program, TCS, Hyderabad from 26-9-22 to 30-9-22.



Fig.9: Online Faculty Development Programme & Student Workshop on Block chain Technology in association with Academic Interface Program, TCS, Hyderabad from 26-9-22 to 30-9-22.

Resource Persons: 1. Ankita Bhagoliwal, IT Analyst, TCS 2. Richard King, Academic Relationship Manager, TCS, Hyderabad. Coordinators: Ms. D. Swapna, Asst. Prof. and Dr. S. Phani Praveen, Asst. Prof.

10. A session on “Implementation of OBE” for the faculty on 19-9-22 by Dr. B. Lakshmi Ramani, Asst.Professor, Dept.of CSE
11. As a part of OBE Implementation the dept. of CSE organized sessions for the faculty by Module Coordinators.

S.No.	Name of the Faculty	Date
1	Mr. B. Vishnu Vardhan	26-9-2022.
2	Ms. A. Madhuri	27-9-2022.
3	Dr. G. Lalitha Kumari	28-9-2022.
4	Dr. K. Koteswara Rao	29-9-2022.
5	Dr. N.V. Ramana Gupta	30-9-2022.
6	Dr. J. Rama Devi	1-10-2022.

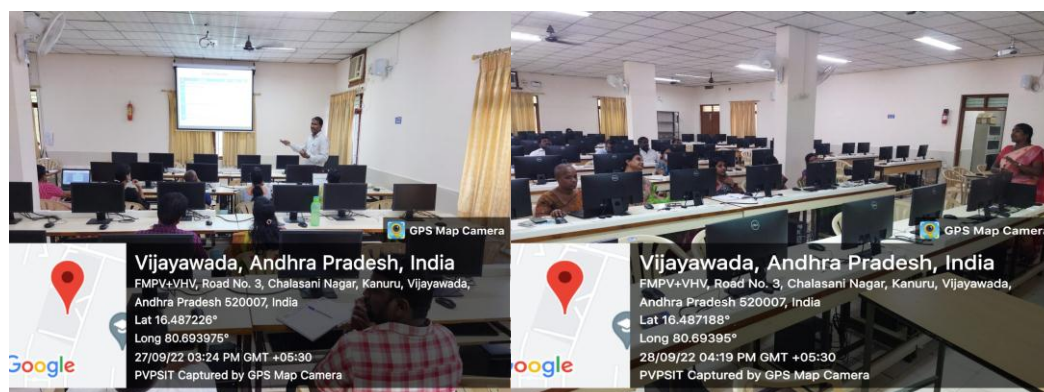


Fig.10: OBE Sessions for the faculty by Module Coordinators.

12. US-Embassy program for III and IV B.Tech CSE Students on November 4, 2022.

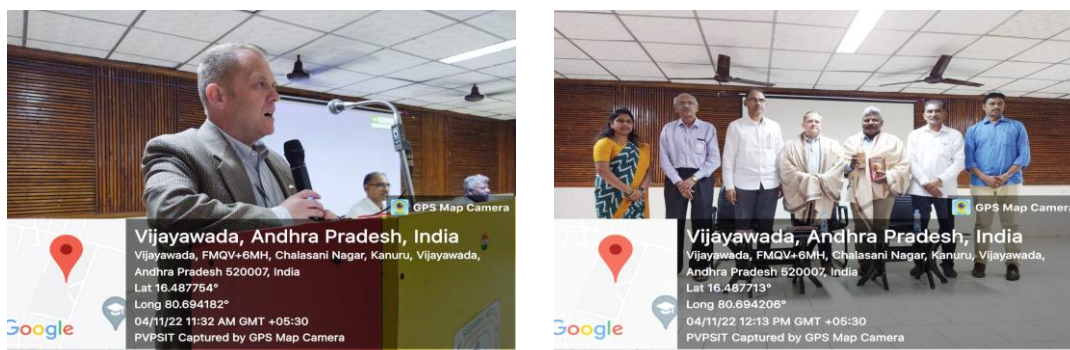


Fig.11: US-Embassy program for III and IV B.Tech CSE Students

13. One day Industry Institute Interaction Webinar on "Importance of SQL and Data in a Project" on 26-11-22 for III B.Tech CSE Students..**Resource Person:** Mr G.Sri Sagar, Data Engineering Lead Optum Global Solutions, Hyderabad. Co-Ordinators: Dr. S.Phani Praveen, Ms. T. Sree Lkashmi, Dr. J. Rama Devi

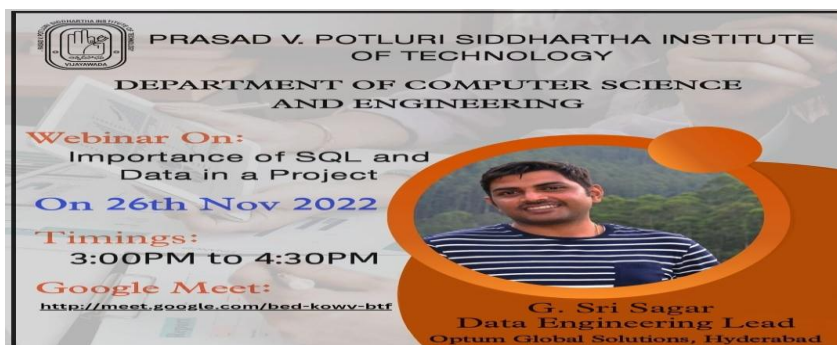


Fig.12: "Importance of SQL and Data in a Project" on 26-11-22 for III B.Tech CSE Students

14. One Day Industry Institute Interaction Webinar "Deep Learning in Biomedical Applications" on 22-11-22 for IV B.Tech students. **Resource Person:** Dr Akash Kumar Bhoi, Researcher (World's Top 2% Scientist 2022), KIET Group of Institutions, Delhi, Ghaziabad, India. **Co-Ordinators:** Dr. P. Naga Srinivas, Ms. Y. Surekha

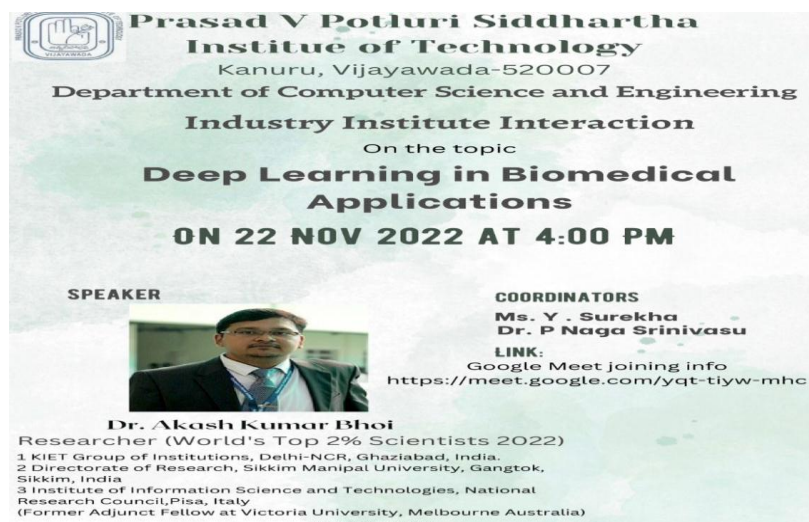


Fig.13: Industry Institute webinar on "Deep Learning in Biomedical Applications" on 22-11-22

15. One Day Industry Institute Interaction Webinar on "Android Database Connectivity" on 19-11-22 for IV B.Tech students. **Resource Person:** Mr Akhil Battula, Android Engineer, Titan, Hyderabad. **Co-Ordinators:** Mr. B. Vishnu Vardhan, B.Raja Rajeswai, Mr. K. Michael Sadguna Rao

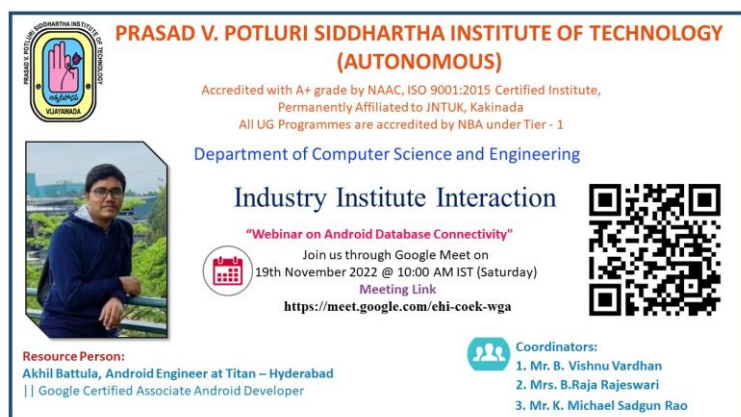


Fig.14 Industry Institute Interaction Webinar on "Android Database Connectivity" for IV B.Tech Students

16. Five days "Hands-on training Workshop on" Internet of Things (IoT) and its applications" from 12-11-22 to 16-11-22. **Resource Person:** Dr Daniel Ravuri, Associate Professor, PVPSIT, Kanuru, Vijayawada. **Coordinators:** Ms. A. Divya
17. One Day Industry Institute Interaction Webinar on "Big Data -Spark" on 15-11-22
 Resource Person: Mr M.Leela Sai Bharat, Senior Analyst, Ernst and Young GDS.
 Coordinators: Ms. A. Ramana Lakshmi, Ms. A. Madhuri
18. Webinar on "Alumni Mock interview sequence-7" on 12-11-22. Resource Person: Mr Ajay Kavuri, Sr Software Engineer, Azure Data, Microsoft, U.S.A

19. Webinar on "Alumni Mock interview sequence-6" on 05-11-22. Resource Person: Mr P.Sai Venkat Rohit, Junior Software Engineer, EPAM, Hyderabad
20. Webinar on "Alumni Mock interview sequence-5" on 05-11-22. Resource Person: Mr D.Jaswanth Babu, Junior Software Engineer, EPAM, Hyderabad
21. Webinar on "Alumni Mock interview sequence-4" on 05-11-22. Resource Person: Miss S.Samyuktha, Program Associate, Wells Fargo, Hyderabad.
22. Webinar on "Alumni Mock interview sequence-3" on 05-11-22. Resource Person: Mr M.Veeranna Chowdary, Software Development Engineer, Amazon, Hyderabad.
23. One Day Expert Talk on "Creating Applied Research Ecosystem" organized by AI&DSResearch group on 28-12-22. Resource Person: Dr Sunil Kumar Vuppala, Director-Data Science, Ericsson Global AI Accelerator, Bangalore



Prasad V Potluri Siddhartha Institute of Technology
An Autonomous & ISO 9001:2015 Certified Institute, Accredited by NAAC with 'A+' Grade
Accredited by NBA for B.Tech- CE, CSE, ECE, EEE, IT, ME Programmes
Approved by AICTE, New Delhi, Affiliated to JNTU-Kakinada
Kanuru, Vijayawada- 520 007

Expert talk on
Creating Applied Research Ecosystem
Organized By
**AI & DS Research Group,
Department of CSE**

Eminent Speaker:



Dr. Sunil Kumar Vuppala
Director- Data Science,
Ericsson Global AI Accelerator
Bangalore.

Venue and time:
Room #161, Seminar Hall,
Ground Floor, PVPSIT
28th Dec, 2022
From 3:00-5:00 PM

Coordinators
Dr. Parvathaneni Naga Srinivasu, CSE
Mr. Prashant Atmakuri, CSE

Convener
Dr. A. Jaya Lakshmi
Professor and Head,
Department of CSE

Fig.15: One Day Expert Talk on "Creating Applied Research Ecosystem"

24. Industry Institute Interaction webinar on "Industry Perspective on Regression and Classification" on 05-12-22. Resource Person: Dr Sunil Kumar Vuppala, Director-Data Science, Ericsson Global AI Accelerator, Bangalore.



PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Webinar on
**Industry Perspective on
Regression and Classification**

 5th December 2022

Timings: 1.00PM to 3.00PM

Meet Link: meet.google.com/xwc-yrre-nsi



Dr Sunil Kumar Vuppala,
Director – Data Science,
Ericsson Global AI
Accelerator, Bangalore

Fig.16: One Day Expert Talk on "Industry Perspective on Regression and Classification"

Faculty Achievements

a. Patents: NIL

b. Guest lecturers delivered:

- i. Dr. G. Lalitha Kumari delivered a Technical Session in the One Week FDP on "Current Research Trends In Computer Science" Organized by Department of CSE, University College of Engineering & Technology, Krishna University, Held on 04th - 08 th July 2022.

c. Reviewers of journals:

- i. Dr. P. Naga Srinivasu nominated as the Review Editor for Frontiers in Materials journal for the section Biomaterials and bio-Inspired Materials.
- ii. Dr. P. Naga Srinivasu nominated as the Review Editor for Technical Advances in Plant Science
- iii. Dr. S. Phani Praveen acted as the reviewer of the manuscript SUPE-D-22-01394 for The Journal of Supercomputing.

d. Faculty Participation (as a Judge, Guest, or BOS member, & Chairing a session, etc.):

- i. Dr. J. Rama Devi acted as Judge for the event KADAMBAM organized by Dept. of FED, PVPSIT on 8-7-2022.
- ii. Dr. S. Phani Praveen appointed as the subject expert for the Board of studies of CSE-Data Science, Chalapathi Institute of Technology, Guntur..

e. Ph.Ds awarded :

- i. Dr. B. N. Swamy was awarded Doctor of Philosophy in Computer Science & Systems Engineering on the thesis “Energy Efficient Multi-Hop Routing Algorithms for Wireless Sensor Networks” from Andhra University.

f. Projects applied for external agencies:

- i. Dr. J. RamaDevi, Sr.Assistant Professor, applied a project “Design and Development of a Novel AgriCrop Model Using Deep Learning in Agriculture system” under SERB POWER Scheme with File Number : SPG/2021/004271
- ii. Dr. B. Lakshmi Ramani, Ms. T. Sri Lakshmi, Ms. A.Madhuri applied a project “SmartPhone-Based System for Early Detection of Cognitive Impairment Using Deep Learning with a Clock-Drawing Test” under SERB POWER Scheme with File Number : SPG/2021/003352.

g. Awards:

- i. Mr.D.Lokesh Sai Kumar has received Certificate of Appreciation for translating the files of the course “Maths I” from IITM (NPTEL) in Sep-22

Faculty Publications/ Conferences

a) SCI/SCIE/ESCI:

- i. Dr. P Naga Srinivasu Published a paper on “6G Driven Fast Computational Networking Framework for Healthcare Applications, ” in IEEE Access, Vol.10, pp. 94235-94248, 2022, doi: 10.1109/ACCESS.2022.3203061. ISSN: 2169-3536 (Scopus)(SCIE)
- ii. Dr. P Naga Srinivasu Published a paper on “Probabilistic Buckshot-Driven Cluster Head Identification and Accumulative Data Encryption in WSN”, in Journal of Circuits, Systems and Computers, Vol.31, Issue. 17, pp. 1-29, 2022, doi:<https://doi.org/10.1142/S0218126622503030>. ISSN: 2169-3536 (Scopus)(SCIE)
- iii. Dr. P Naga Srinivasu Published a paper on “Automatic Data Clustering by Hybrid Enhanced Firefly and Particle Swarm Optimization Algorithms,” Mathematics, vol. 10, No. 3532. <https://doi.org/10.3390/math10193532> (Scopus) (SCIE)
- iv. Dr. P Naga Srinivasu Published a paper on “TFAD: TCP flooding attack detection in software-defined networking using proxy-based and machine learning-based mechanisms,” in Cluster Computing, Springer. Doi: <https://doi.org/10.1007/s10586-022-03666-4> ISSN: 2180-1266 (Scopus)(SCIE)
- v. Dr.S.Phani Praveen published a paper “Multi-Features Disease Analysis Based Smart Diagnosis for COVID-19”, in Computer Systems Science & Engineering, Vol-45, No-1, Aug-2022, ISSN:0267-6192 (SCIE) (Scopus Indexed)
- vi. Dr.S.Phani Praveen published a paper “An Efficient Unsupervised Learning Approach for Detecting Anomaly in Cloud”, in Computer Systems Science & Engineering, Vol-45, No-1, Aug-2022, ISSN:0267-06192 (SCIE) (Scopus Indexed)
- vii. Dr.S.Madhavi published a paper “Method for Quantum Denoisers Using Convolutional Neural Network”, in Hindawi, Computational Intelligence and Neuroscience, Vol-2022, Oct-2022, ISSN: 1687-5273 (Scopus Indexed) (SCIE)
- viii. Dr.S.Phani Praveen published a paper “COVID-19 EDA analysis and prediction using SIR and SEIR models” in International Journal of Healthcare Management, ISSN:2047-9719 (Article in Press) (Scopus Indexed) (ESCI)

- ix. Dr.S.Madhavi published a paper “ Optimal Remote Qubit Teleportation Using Node2vec” in Technical Gazette, Vol-30, No-1, Dec-22, ISSN: 1330-3651 (SCIE)
- x. Dr.K.Koteswara Rao and Dr.G.Lalitha Kumari published a paper “A Novel Deep Convolutional Neural Network for Diagnosis of Skin Disease” in Traitement du Signal, Vol-39, No-5, Nov-22, ISSN: 1958-5608 (SCIE) (Scopus Indexed)

b)Scopus indexed journals:

- i. Dr.K.Koteswararao published a paper “ Prioritization of Test Cases in Software Testing Using M2 H2 Optimization”, in International Journal of Modern Education and Computer Science, Oct-2022, ISSN: 2075-0161 (Scopus Indexed)
- ii. Ms.A.Divya published a paper “Disease Prediction Based on Symptoms Given by Using Machine Learning”, in SN Computer Science, Oct-2022, Volume-3, Issue-6, ISSN: 2661-8907 (Scopus Indexed)
- iii. Mr.B.Vishnu Vardhan published a paper “Soil Moisture Retrieval Using Sail Squirrel Search Optimization-based Deep Convolution Neural Network with Sentinel-1 Images” in International Journal of Image and Graphics, Vol-22, Issue-5, September-22, ISSN:0219-4678 (Scopus Indexed)
- iv. Ms.A.Ramana Lakshmi published a paper “ Chemical Mining using Big Data Image Analytics with Deep Three-Dimensional Convolutional Neural Network” in European Chemical Bulletin, Vol-11, Issue-11, Nov-22, ISSN: 2063-5346 (Scopus Indexed)
- v. Dr.S.Phani Praveen and Dr.P.Naga Srinivas published a paper “ ResNet-32 and FastAI for diagnoses of duet al carcinoma from 2D tissue slides” in Scientific Reports, Vol-12, No-1, Dec-22, ISSN: 2045-2322 (SCIE) (Scopus Indexed)
- vi. Dr.S.Phani Praveen published a paper “Chronic Kidney Disease Prediction Using ML-Based Neuro-Fuzzy Model” in International Journal of Image and Graphics, ISSN: 0219-4678 (ESCI) (Scopus Indexing) (Article in Press)
- vii. Dr.S.Phani Praveen published a paper “ A robust framework for handling health care information based on machine learning and big data engineering techniques” in International Journal of Healthcare Management, Dec-22, ISSN: 2047-9719 (ESCI) (Scopus Indexed) (Article in Press)
- viii. Ms.Y.Manasa published a paper “ Using Mutli-Label Multi-Class Support Vector Machines with Semantic and Lexical Features for Aspect Category Detection” in International Journal on Recent

and Innovation Trends in Computing and Communication, Vol-10, Issue-11, Oct-2022, ISSN: 2321-8169 (Scopus Indexed)

c) UGC/other journals: NIL

d) Book chapters:

- i. Dr.B.Lakshmi Ramani and Ms.T.Sri Lakshmi presented and published a paper “Recognition of Hand Gesture-Based Sign Language Using Transfer Learning” in Lecture Notes in Networks and Systems, Oct-22, ISBN:978-981-19-1976-3. **(Scopus Indexed)**
- ii. Ms.A.Madhuri, Ms.D.Swapna, Dr.S.Phani Praveen and Ms.T.Sri Lakshmi published a book chapter “Distributed Computing Meets Movable Wireless Communications in Next Generation Mobile Communication Networks” in Lecture Notes on Data Engineering and Communication Technologies, Sep-2022, ISBN: 978-981-19-3015-7 (Scopus)
- iii. Dr.S.Phani Praveen, A.Madhuri and D.Swapna presented and published a paper “Different Feature Selection Methods Performance Analysis for Intrusion Detection” in 5th International Conference on Smart Computing and Informatics (SCI-2021) ISBN: 978-981-16-9705-0 (Scopus)

e) Conferences:

- i. Dr.S.Phani Praveen published a paper “A Generalized Model for Identifying Fake Digital Images through the Application of Deep Learning”, in 3rd International Conference on Electronics and Sustainable Communication Systems (ICESC), 17th – 19th Aug-2022, ISBN: 978-1-6654-7971-4 **(IEEE Conference)**
- ii. Dr.S.Phani Praveen published a paper “Sentiment Analysis using deep learning for use in recommendation systems of various public media applications ”, in 3rd International Conference on Electronics and Sustainable Communication Systems (ICESC), 17th – 19th Aug-2022, ISBN: 978-1-6654-7971-4 **(IEEE Conference)**

Workshops/Faculty Development Programs attended by the faculty

a) Seminars/Webinars:

- i. Mr A.Prashant and Mr V.Rajesh participated in 1-Day Awareness program on "National Intellectual Property Awareness Mission" organized by IPR, India on 12-10-22.

b) Workshops:

- i. Ms V.Swathi attended two day workshop on "Research conclave 22: Exchanging Futuristic ideas for Innovative Research" organized by Vignan University, Vadlamudi from 08-07-22 to 09-07-22.
- ii. Mr. S.Krishna Kishore attended three day international virtual workshop on " Thesis Writing and Publication" organized by Malaysian Industrial Relations& Human Resource Association (MIRHA), Malaysia from 08-07-22 to 10-07-22
- iii. Dr P.Sai Kiran participated in 1-Day state level workshop for Autonomous and NAAC Accredited Engineering and Pharmacy colleges on Indian Rankings-2023 organised by IQAC, Andhra Loyola Institute of Engineering and Technology Vijayawada on 16-11-22.

c) STTP/STCs:

- i. Dr. S.Phani Praveen participated in one Week ISTE Approved Short Term Training Programme (STTP) on "Data Science" organized by K J College of Engineering and Management Research KJEI's, Pune from 11-07-22 to 15-07-22.
- ii. Dr B.Lakshmi Ramani, Mrs T.Sri Lakshmi, Mrs A.Madhuri participated in one week "2022 IEEE CIS Summer School on Emerging Research Trends in Computational Intelligence Techniques to address Challenges in Biomedical Data and Imaging" organised by National Institute of Technology Arunachal Pradesh from 07-11-22 to 11-11-22
- iii. Dr S.Phani Praveen participated in one week Online Short-Term Course on "End-to-End Data Science Product Development" organized by Sir C R Reddy College of Engineering, Eluru in association with CCE, NIT Warangal from 05-12-22 to 09-12-22

d) Faculty Development Programmes:

- i. Mr A.Yuva Krishna participated in Five day FDP on "Microsoft power BI Data analyst Associate" from 25-7-2022 to 29-7-2022.
- ii. Ms D.Sree Lakshmi, Ms. A.Divya participated in one week AICTE National level FDP on "Amazon Web Services" organized by MIC college in collaboration with Brain-o-Vision solutions & AICTE from 22-8-22 to 27-8-22.
- iii. Dr S.Phani Praveen participated in one week AICTE National level FDP on "Amazon Web Services" organized by Vignan Institute Management and Technology for Women in collaboration with Brain-o-Vision solutions & AICTE from 22-8-22 to 27-8-22.
- iv. Mr V.Rajesh participated in one week AICTE National level FDP on "Amazon Web Services" organized by CR Reddy college of Engineering in collaboration with Brain-o-Vision solutions & AICTE from 22-8-22 to 27-8-22.

- v. Mrs V.Swathi participated in 1-Month FDP on "Python full stack" organized by APSSDC and Pantech solutions from 11-7-22 to 12-8-22.
- vi. Dr S.Phani Praveen, Mrs A.Madhuri, Mrs D.Swapna participated in 1-Week FDP on " "Introduction to Machine Learning and Its Applications" organized by Vignan's institute of management and technology for women Hyderabad from 01-08-22 to 05-08-22
- vii. Mrs Y.Manasa, Miss P.Dedeepya, Mrs V.Swathi, Mr S.Krishna Kishore, Dr N.V.Ramana Gupta, Mr Michael Kona participated in 1-Week AICTE recognized FDP on "Enhancing Research Capabilities for Academic career progression" organized by PVPSIT Vijayawada from 05-09-22 to 09-09-22
- viii. Dr B.N.Swamy participated in 1-Week online FDP on " IOT Induced Artificial Intelligence for Emerging Computing Paradigms" organized by Dr. B. R. Ambedkar National Institute of Technology, Jalandhar from 04-10-22 to 08-10-22.
- ix. Dr S.Phani Praveen, Mrs A.Madhuri, Mrs D.Swapna participated in 1-Week FDP on " "Advanced Deep Learning Techniques using Python" organized by Vignan's institute of management and technology for women Hyderabad from 24-10-22 To 28-10-22
- x. Mrs D.Sree Lakshmi, Mrs A.Divya, Mr V.Rajesh participated in 1-Month FDP on" Advanced Python Programming" organized by Pantech E-Learning Chennai and APSSDC from 27-10-22 to 27-11-22.
- xi. Mr L.V.Krishna Rao participated in 2 week ATAL FDP on " Data analysis tools and techniques for text and speech analytics" organized by Lakkireddy bali reddy college of engineering mylavaram from 14-11-22 to 25-11-22.
- xii. Ms P.Dedeepya participated in 1-Week FDP on" 21st century skills & Teaching Methodologies organized by APSCHE in association with CEMCA and Andhra Loyola college Vijayawada from 19-12-22to 22-12-22.
- xiii. Dr G.Lalitha Kumari, Dr M.Sailaja, Mrs Y.Surekha participated in 1-Week online FDP on" Recent Trends in Applications of Emerging Technologies" organized by VVIT, Nambur from 28-11-22 to 3-12-22.
- xiv. Dr A.Jaya Lakshmi, Dr N.V.Ramana Gupta participated in 1-Week online mode Professional Development Programme on "Emotional Intelligence" organized by NITTTR, Chennai from 28-11-22 to 02-12-22.

- xv. Dr S.Madhavi participated in 2-Weeks ATAL FDP on "Quantum computing and Quantum information Technology:New Vertical of Computing Technology organized by Manipal Academy of Higher Education from 21-11-22 to 2-12-22.
- xvi. Mr A.Prasanth participated in 1-Week FDP program on "Python Programming" organized by Infosys/Spring board from 17-10-22 to 21-10-22.

e) Guest Lectures :

- i. Dr.Vijaya Kumar K successfully participated in the Guest Lecture on Object Depth Estimation using Single RGB Camera organised by School of Computer Science and Engineering, VIT-AP University, Amaravati on 27th August 2022.
- ii. Mr S.Krishna Kishore participated in 1-Day Foreign Guest Lecture on "Digital Transformation of Modern Business: The 4th Industrial Revolution organized by VIT, AP University on 02-12-22.

f) Awareness programmes/Interaction meet/Quizzes, etc:

- i. Mr L.V.Krishna Rao completed 3-Months Training program on "JAVA" organized by EPAM Systems india private Ltd, Hyderabad from 01-05-2022 to 31-08-22.
- ii. Mrs D.Sree Lakshmi, Ms P.Dedeepya completed 2- Months Google Educator Training program on "Google Android Development with Kotlin" organized by VVIT, Guntur from 16-06-2022 to 13-08-22.
- iii. Mr P.Anil Kumar completed one year AICTE Training Certificate on "Innovation Ambassador"(Advanced Level) organized by MoE's Innovation cell & AICTE& IIC from 10-10-22 to 22-10-22.
- iv. Mrs V.Swathi completed one month Certification program Faculty Build -A-Thon 2022 on "Applied Data Science" organized by IBM from 16-07-22 to 22-08-22.
- v. Mr S.Krishna Kishore certified Pearson Vue Certified Test Administrator from Pearson/VUE on 22-12-22.

g) Conferences:

- i. Dr S.Phani Praveen, Mrs D.Swapna participated in International conference on Augmented Intelligence and sustainable systems (ICAISS-2022) and presented a paper "An Adaptive load balancing technique for Multi SDN Controllers" organized by Care college of Engineering from 24-11-22 to 26-11-22.

- ii. Mr D.Lokesh Sai Kumar participated in Sixth International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) organized by RVS Technical Campus, Coimbatore, Tamil Nadu, INDIA from 1-12-22 to 3-12-22.
- iii. Dr S.Phani Praveen participated in International Conference on Augmented Intelligence and Sustainable Systems (ICAISS-2022) organized by CARE College of Engineering, Trichy, India from 24-11-22 to 26-11-22.

h) MOOCs courses completed by the faculty:

- i. Ms V.Swathi completed course on Cognitive class.ai on "Data Visualization with Python" organized by IBM Developer Skills Network on 26-7-2022.
- ii. Ms V.Swathi completed course on Cognitive class.ai on "Python 101 For Data Science" organized by IBM Developer Skills Network on 25-7-2022.
- iii. Ms V.Swathi completed course on Cognitive class.ai on "Data Analysis with Python" organized by IBM Developer Skills Network on 25-7-2022.
- iv. Mr. V. Rajesh successfully cleared the assessment by HACKER RANK for the skill Java (Basic) on 27-7-2022.
- v. Ms P.Dedeepya completed Training and internship on "Salesforce Administrator Virtual internship" organized by Smart internz from 1-7-22 to 30-9-22.
- vi. Mr A.Prashant completed 1-Year AICTE Training on "Innovation Ambassador" (Foundation Level) organized by MoE's Innovation cell & AICTE& IIC from 30-9-21 to 30-9-22.
- vii. Mrs D.Swapna participated in Educator Training "AWS Academy Solutions Architect" organized by Eduskills on 18-8-22.
- viii. Dr. K. Vijay Kumar undergone Innovation Ambassador training "Foundation Level" conducted by MOE's Innovation Cell & AICTE during the IIC calendar year 2021-22.
- ix. Mr.D.Lokesh Sai Kumar has completed 4-week course on "Graph Analytics for Big Data" conducted by UC San Diego (Coursera) in Nov-2.
- x. Mr.D.Lokesh Sai Kumar has completed 5-week course on "C for Everyone: Programming Fundamentals" conducted by UC Santa Cruz (Coursera) in Nov-22.
- xi. Mrs A.Madhuri completed four weeks NPTEL FDP on "Python for Data Science" organized by NPTEL from 01-07-22 to 31-08-22.
- xii. Dr S.Phani Praveen participated in 12 weeks NPTEL FDP on "Cloud Computing" organized by NPTEL from 01-7-22 to 31-10-22.

Student Achievements

a) Co-curricular Activities:

- i. 4 teams from CSE department got selected for Smart India Hackathon-2022.

S.No	Organization	IDEA ID – Name	Team Leader	Faculty Mentors
1	AICTE, MIC-Student Innovation	12571 – V-SERV	A. Alekhya-19501A0517	Mr B Vishnu Vardhan Dr V Jagadish
2	Ministry of Mines	26968 - Intruders1	B. K. Aparna-19501A0520	Dr B Janakiramaiah Dr B Lakshmi Ramani
3	AICTE, MIC-Student Innovation	15740 - Befikar Farmers	K. Gopichand-19501A05A3	Mr V. Rajesh Dr J Rama Devi
4	Ministry of Rural Development	26974-Raising Falcons	Mukkapati Rohith-19501A05C2	Dr. K Koteswara Rao Dr. M Sailaja

- ii. The team Befikar Farmers won 2nd prize worth Rs.75,000/- in Smart India Hackathon -22



Fig.17:” Befikar Farmers” team won 2nd prize worth Rs.75,000/- in Smart India Hackathon -22

- iii. The team V-SERV won 3rd prize worth Rs.50,000/- in Smart India Hackathon -22.



Fig.18: “V-SERV” team won 3rd prize worth Rs.50,000/- in Smart India Hackathon -22

- vi. Mr. G. Bhargava Ramudu of IV CSE won 1st place in Virtusa Neural Kack Season 6.
- vii. Ms.A.Amuktha Sai, Ms. A.Devi of II CSE won I prize in Idea Presentation organised by department of CSE in association with ISTE on Engineers Day on 15-8-22.
- viii. Ms. M. Gayathri of IV CSE won II prize in Idea Presentation organised by department of CSE in association with ISTE on Engineers Day on 15-8-22.
- ix. Ms. Ch. Mounika of II CSE won III prize in Idea Presentation organised by department of CSE in association with ISTE on Engineers Day on 15-8-22.
- x. Ms. K. Pujitha, Mr. G. Chandrahaas Reddy, Mr. G. Taraka Rohith of IV CSE won I prize in Team Quiz organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.
- xi. Ms. Y.Pragna, Ms. Sk.Hafsah, Ms. T. Sirija of II CSE won II prize in Team Quiz organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.
- xii. Mr. K. Bhargava, Mr. K. Nagaraju, Mr.K. Kaushik of II CSE won III prize in Team Quiz organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.
- xiii. Ms.T. Sirija of II CSE won I prize in Speak Out organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.
- xiv. Mr.S. Siddharth of III CSE won II prize in Speak Out organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.
- xv. Ms. B. Deekshitha, Ms. E. Srakhya of II CSE won III prize in Speak Out organised by department of CSE in association with ISTE on Engineers Day on 16-8-22.

- xvi. Mr.Deva Karthik B,Mr.Bhanu Prasanna K, Mr.Yaswanth A, Mr.Sitha Ram B of IV CSE Team Intruders secured **3rd prize** worth **Rs.5,000/-** in the National Hackathon 2022 organized by IIEC,VIT AP University on 12th and 13th November 2022.
- xvii. Mr. K. Bhargava Chowdary, Mr. M.Hemanth, Mr.J.Pavan Kumar, Mr, K.Shashank of II CSE Team Amatuers for participating in the National Hackathon 2022 organized by IIEC,VIT AP University on 12th and 13th November 2022.
- xviii. Mr Hemanth V, Mr.Hemanth V, Mr.T Santhosh. of II CSE Team Straw Hats for participating in the National Hackathon 2022 organized by IIEC,VIT AP University on 12th and 13th November 2022.
- xix. 58 students from III and IV B.Tech CSE participated in the US-Embassy programme organised by the Department of CSE at PVPSIT, Vijayawada, on November 4, 2022.
- xx. 52 Students from II and III B.Tech CSE students participated in various technical events NEONITE 22 organized by VRSEC, Vijayawada held on 28th and 29th September, 2022.
- xxi. Ms. Y. Yasawini of IV CSE won the 3rd Prize in Modern Dance at district-level youth festival competitions conducted by the Department of Youth Services, Government of Andhrapradesh, at Ghantasala Music College, Vijayawada, on November 10th , 2022.
- xxii. 111 students of II year certified for the C programming course by NPTEL. 63 students got Elite + Silver. And 47 students got Elite and 1 student successfully completed the course. 1student stood in Top 5%.
- xxiii. 136 students of III year certified for the JAVA course by NPTEL. 25 students got Elite + Gold. 84 students got Elite + Silver. And 25 students got Elite and 2 student successfully completed the course. 2 students stood in Top 1%. 4 students stood in Top 2%. 19 students stood in Top 5%.
- xxiv. 14 students from IV B.Tech CSE programme were certified in the month of October 2022 out of 17 registered students for the Microsoft Upskilling Course (MSC007) Azure Fundamentals.
- xxv. 12 students from III B.Tech CSE programme were certified in the month of October 2022 out of 30 registered students for Microsoft Upskilling Course – MSC038 – Dynamics 365 Fundamentals Customer Engagement Apps (CRM).
- xxvi. 15 Students from II B.Tech CSE students participated in various technical events winter notch 22 organized by VRSEC, Vijayawada held on 26th November, 2022.

- xxvii. On the occasion of the Inter-Institutional Cultural Meet of 2022, which was held on December 28, 2022, Siddhartha Academy presented an appreciation award to the 1st Runner Up Befikar Farmers Team of Smart India Hackathon -22.



Fig.19: Inter-Institutional Cultural Meet of 2022

b) Extra-curricular Activities:

- i. Ms. L.Tejaswi of IV CSE won 1st Prize in Patriotic songs competition conducted by PVPSIT on eve of 75th Independence Day celebrations.
- ii. Ms. M.Sarvani of III CSE won 2nd Prize in Patriotic songs competition conducted by PVPSIT on eve of 75th Independence Day celebrations.
- iii. P.S.N Sreya Sri of III CSE won 3rd Prize in Patriotic songs competition conducted by PVPSIT on eve of 75th Independence Day celebrations.
- iv. Mr. M.N.D.Manikanta of IV CSE and Ms. N.Veena of III CSE participated in Patriotic songs competition conducted by PVPSIT on eve of 75th Independence Day celebrations.
- v. 15 students of CSE participated in Deepalankarana event organized by PVPSIT on 22-10-22.
- vi. Ms. Y. Yasawini of IV CSE won the 3rd Prize in Modern Dance at district-level youth festival competitions conducted by the Department of Youth Services, Government of Andhrapradesh, at Ghantasala Music College, Vijayawada, on November 10th, 2022.
- vii. As a part of the weekend cultural programme, the College Cultural Committee organised cultural events for B.Tech. CSE students on November 24th, 2022, in the Auditorium. 37 students from II B.Tech. CSE performed group dance programs, songs, and monoactions, and nine students participated as volunteers. 33 students from III B.Tech. CSE performed group dance programs, songs, and anchors, and 15 other students participated as volunteers.

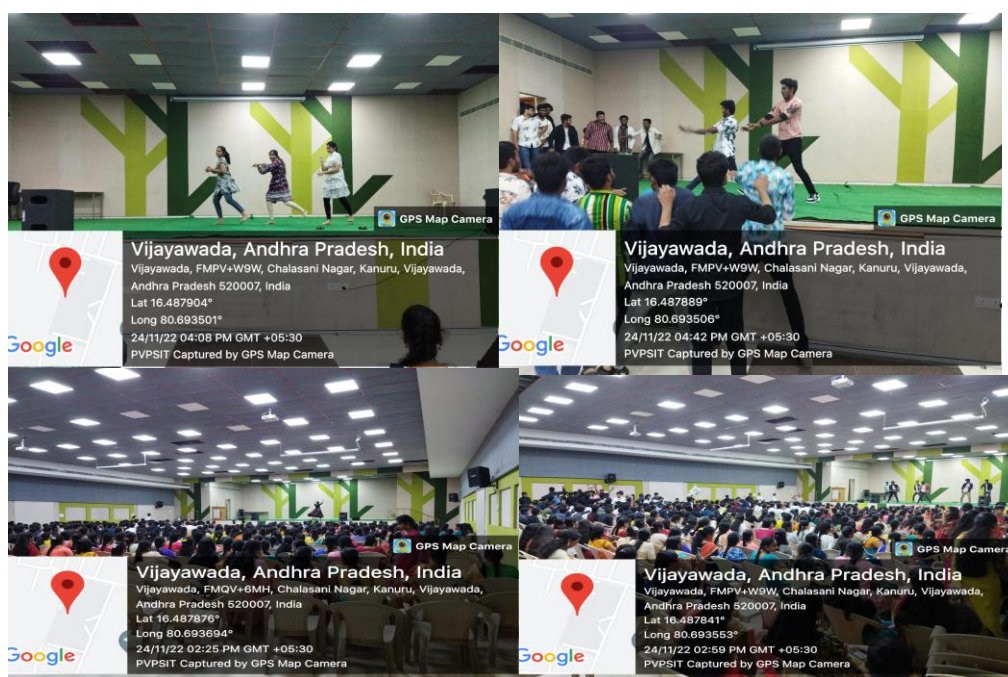


Fig.20: Cultural program by the College Cultural Committee organised cultural events for B.Tech. CSE students

- viii. As a part of Fresher's day program, the College Cultural Committee organized cultural events for B.Tech. I and II CSE students on December 3rd, 2022, in the Open air Auditorium and 23 students actively participated in various cultural programs.



Fig.21: Fresher's day program, the College Cultural Committee organized cultural events for B.Tech. I and II CSE students

c) Students Publication

- i. Ms.B.Deepika, Ms.Ch.Durga Akhila, Ms.A.Tonika Devi, Ms.B.Lavanya, and Ms.E.Sravya Teja published a paper "Disease Prediction Based on Symptoms Given by Using Machine Learning", in SN Computer Science, Oct-2022, Volume-3, Issue-6, ISSN: 2661-8907 (Scopus Indexed)

Higher Education:**GRE LIST**

S.NO	REG.NO	NAME	Exam Reg No
1.	18501A0548	Soma Sai Surya Teja Reddy Kamatam	8328883 July 11, 2022
2.	19501A0522	Naga Gopala Krishna Bandi	0279425 December 1, 2022
3.	19501A0528	Snehita Bharata	1429513 September 17, 2022
4.	19501A0586	Karthik Aluru	1639273 November 26, 2022
5.	19501A0596	Pooja sri Kolli	1580097 November 17, 2022
6.	19501A05E5	Sathvika Pathuri	1465286 September 26, 2022
7.	19501A05F8	Rishita Gundimeda	1465253 November 14, 2022
8.	19501A0519	charan karthik naik banavath	1761795 December 23, 2022
9.	19501A0589	charishma kethineedi	1450406 December 3, 2022
10.	19501A05F3	Teja Polimetla	1548111 October 15, 2022

IELTS LIST

S.NO	REG.NO	NAME	Exam Reg No	SCORE
1.	19501A0592	Kodali Sravya Sri	520269	7.5 Oct, 2022
2.	19501A05F8	Rishita Gundimeda	563666	7.0 Nov, 2022
3.	19501A05B1	Maddipati Geeshma Sri Sai	W5819604	7.5 Nov, 2022

TOFEL LIST

S.NO	REG.NO	NAME	Exam Reg No	SCORE
1.	19501A0586	Karthik Aluru	6788810227030696	96

Got Admission

S.NO	REG.NO	NAME	OFFERED COURSE	UNIVERSITY	REFERENCE NUMBER
1.	18501A0594	P.Saketh	Computer Science MS Program	Georgia State University	February 8, 2022
2.	18501A05A3	K.Sri Harrsha	Computer Science MS Program	The University of Texas at Arlington	UTA ID: 1002063354

Placements

- i. Mr. B. Nitesh(18501A0508) got selected for JUSPAY with a package of 21 LPA

S.No	Roll Number	Name of the Student	Compnay Name	Pay Package
1	19501A0525	Mr. B. Sudeep	CTS GenC	4 LPA
2	19501A0526	Mr. B. Seetha Ram	CTS GenC	4 LPA
3	19501A0532	Ms. B. Anvitha	CTS GenC	4 LPA
4	19501A0593	Mr. K. Sai Manikanta	CTS GenC	4 LPA
5	19501A0599	Ms. K. Swetha	CTS GenC	4 LPA
6	19501A05A2	Ms. K. Ananya	CTS GenC	4 LPA
7	19501A0506	Ms. A. Sushma Parvathi	CTS GenC	4 LPA
8	19501A0540	Ms. Ch. Pujitha	CTS GenC	4 LPA
9	19501A0517	Ms. A Alekhya	Torry Horris	5 LPA
10	19501A0520	Ms. B Kanaka Aparna	Torry Horris	5 LPA
11	19501A0538	Ms. Ch. Meghana	Torry Horris	5 LPA
12	19501A0559	Ms. G. Naga Harshitha	Torry Horris	5 LPA
13	19501A0561	Ms. G. Vimal Keerthi	Torry Horris	5 LPA
14	19501A05E3	Ms. P. Divya Sri	Torry Horris	5 LPA
15	19501A05G3	Ms. Sk. Ajajunnisa	Torry Horris	5 LPA
16	19501A05A0	Mr. K. Rohith	Torry Horris	5 LPA
17	19501A0517	Ms. A.Alekhya	Accenture AASE	6.5LPA
18	19501A0540	Ms. Ch. Pujitha	Accenture AASE	6.5LPA
19	19501A0543	Ms. Ch. Taraka Tejaswini	Accenture AASE	6.5LPA
20	19501A0561	Ms. G. Vimal Keerthi	Accenture AASE	6.5LPA
21	19501A05A5	Ms. K. Ramya	Accenture AASE	6.5LPA
22	19501A05D4	Ms. N. Jaya Lakshmi	Accenture AASE	6.5LPA
23	19501A05E4	Ms. P. Sushma Sri	Accenture AASE	6.5LPA
24	19501A05I6	Ms. V. Varshitha	Accenture AASE	6.5LPA

25	19501A05J3	Ms. P. Yaswanthi V S Pravallika	Accenture AASE	6.5LPA
26	19501A0503	Mr. A. Srinath Reddy	Accenture AASE	6.5LPA
27	19501A0527	Ms. K. Bhanu Prasanna	Accenture AASE	6.5LPA
28	19501A05E0	Mr. P. Vamsi	Accenture AASE	6.5LPA
29	19501A05E9	Mr. P. Ganesh	Accenture AASE	6.5LPA
30	19501a05h7	Mr. T. Priya Vardhan Reddy	Accenture AASE	6.5LPA
31	19501A05I2	Mr. T. Naveen	Accenture AASE	6.5LPA
32	19501A0506	Ms. A. Sushma Parvathi	Accenture ASE	4.5LPA
33	19501A0516	Ms. A Sai Sindhuri	Accenture ASE	4.5LPA
34	19501A0520	Ms. B. Kanaka Aparna	Accenture ASE	4.5LPA
35	19501A0528	Ms. B. Snehita	Accenture ASE	4.5LPA
36	19501A0531	Ms. B. Chaitanya Sreya	Accenture ASE	4.5LPA
37	19501A0533	Ms. B. Lasya Naga Sai Priya	Accenture ASE	4.5LPA
38	19501A0542	Ms. Ch. Prasanna Chandrika	Accenture ASE	4.5LPA
39	19501A0559	Ms. G. Naga Harshitha	Accenture ASE	4.5LPA
40	19501A0566	Ms. G. Haripriya	Accenture ASE	4.5LPA
41	19501A0575	Mr. J. Yuva Sri	Accenture ASE	4.5LPA
42	19501A0579	Ms. K. Jyothsna	Accenture ASE	4.5LPA
43	19501A0588	Ms. K. Thirisha	Accenture ASE	4.5LPA
44	19501A0591	Ms. K. Sravani Chowdary	Accenture ASE	4.5LPA
45	19501A05B2	Ms. M. Keerthi Sahithi	Accenture ASE	4.5LPA
46	19501A05C0	Ms. P. Monika Sai	Accenture ASE	4.5LPA
47	19501A05C4	Ms. P. Phani Madhavi Chowdary	Accenture ASE	4.5LPA
48	19501A05C6	Ms. M. Harshitha	Accenture ASE	4.5LPA
49	19501A05D5	Ms. N. Kiranmai Sai Lakshya	Accenture ASE	4.5LPA
50	19501A05D6	Ms. N. Sree Vidya	Accenture ASE	4.5LPA
51	19501A05D9	Ms. P. Sowmya Sri	Accenture ASE	4.5LPA
52	19501A05E1	Ms. P. Siva Praneetha	Accenture ASE	4.5LPA
53	19501A05E3	Ms. P. Divyasri	Accenture ASE	4.5LPA
54	19501A05E8	Ms. P. Sruthi	Accenture ASE	4.5LPA
55	19501A05F6	Ms. R. Alekhya Sarmada	Accenture ASE	4.5LPA
56	19501A05F8	Ms. G. Rishita	Accenture ASE	4.5LPA
57	19501A05G2	Ms. S. Teja Sri	Accenture ASE	4.5LPA
58	19501A05G3	Ms. Sk. Ajajunnisa	Accenture ASE	4.5LPA
5	19501A05G6	Ms. Sk. Jameelunnisa	Accenture ASE	4.5LPA
60	19501A05H2	Ms. S. Padma Priya	Accenture ASE	4.5LPA
61	19501A05I0	Ms. T. Geethika	Accenture ASE	4.5LPA
62	19501A05J0	Ms. V. Yamini Priya	Accenture ASE	4.5LPA
63	19501A05J1	Ms. V. Voshma Reddy	Accenture ASE	4.5LPA
64	20505A0504	Ms. B. Dhana Lakshmi	Accenture ASE	4.5LPA
65	19501A0504	Mr. A. Bhanu Anish	Accenture ASE	4.5LPA
66	19501A0508	Mr. A. V S Manikanta Mahadev	Accenture ASE	4.5LPA
67	19501A0512	Mr. A. Sai Krishna	Accenture ASE	4.5LPA
68	19501A0518	Mr. B. Deva Karthik	Accenture ASE	4.5LPA

69	19501A0522	Mr. B. Naga Gopala Krishna	Accenture ASE	4.5LPA
70	19501A0524	Mr. B. Nithin	Accenture ASE	4.5LPA
71	19501A0529	Mr. B. Ravi Kiran	Accenture ASE	4.5LPA
72	19501A0541	Mr. Ch. Sriharsha	Accenture ASE	4.5LPA
73	19501A0548	Mr. D. Lakshmi Narayana Naik	Accenture ASE	4.5LPA
74	19501A0549	Mr. D. Mahesh Sai	Accenture ASE	4.5LPA
75	19501A0552	Mr. Farooq Baig	Accenture ASE	4.5LPA
76	19501A0562	Mr. G. Kevin Michael	Accenture ASE	4.5LPA
77	19501A0563	Mr. G. Siri Sai Sri Ram	Accenture ASE	4.5LPA
78	19501A0594	Mr. K. Uday Kiran	Accenture ASE	4.5LPA
79	19501A0597	Mr. R. Bhanu Rakesh	Accenture ASE	4.5LPA
80	19501A05A0	Mr. K. Rohith	Accenture ASE	4.5LPA
81	19501A05B6	Mr. M. Vamsi Krishna	Accenture ASE	4.5LPA
82	19501A05C8	Mr. M. Saravana Chakradhar	Accenture ASE	4.5LPA
83	19501A05D0	Mr. N. Naveen	Accenture ASE	4.5LPA
84	19501A05F0	Mr. P.Bhanu Phanindra	Accenture ASE	4.5LPA
85	19501A05F1	Mr. P.Prakash	Accenture ASE	4.5LPA
86	19501A05F3	Mr.P. Teja	Accenture ASE	4.5LPA
87	19501A05F9	Mr. S. Karthikeya	Accenture ASE	4.5LPA
88	19501A05G7	Mr. Sk. Khaja Peer	Accenture ASE	4.5LPA
89	19501A05H5	Mr. S. Karthik	Accenture ASE	4.5LPA
90	19501A05I9	Mr. V. Rohith	Accenture ASE	4.5LPA
91	20505A0512	Mr. M. Deva Chandra Raju	Accenture ASE	4.5LPA
92	19501A0501	Mr. A. Ravi Sai Teja	GenC	4LPA
9394	19501A0517	Ms. A. Alekhya	GenC	4LPA
95	19501A0522	Mr. B. Naga Gopala Krishna	GenC	4LPA
96	19501A0533	Ms. B. Lasya Naga Sai Priya	GenC	4LPA
97	19501A0555	Mr. G Mikhil	GenC	4LPA
98	19501A0563	Ms. G. Sri Ram	GenC	4LPA
99	19501A0570	Mr. J. Sai Charan	GenC	4LPA
100	19501A0574	Mr. R. Jaswanthchowdary	GenC	4LPA
101	19501A0575	Ms. J Yuvasri	GenC	4LPA
102	19501A0587	Mr. K.Suswadeep	GenC	4LPA
103	19501A05B1	Ms. M. Geeshma Sri Sai	GenC	4LPA
104	19501A05B4	Ms. M. Tejaswi	GenC	4LPA
105	19501A05C5	Mr. M.Lokesh	GenC	4LPA
106	19501A05D4	Ms. N Jaya Lakshmi	GenC	4LPA
107	19501A05G5	Mr. Sk.Irfan	GenC	4LPA
108	19501A05H8	Mr. T Pavan Kumar	GenC	4LPA
109	19501A05I8	Mr. V. Mohan N V Sai	GenC	4LPA
110	20505A0505	Ms. Ch. Suvatha	GenC	4LPA
111	20505A0517	Ms. T. Yavasvi	GenC	4LPA
112	19501A0510	Mr. K. Anvesh	GenC Elevate	4.5LPA
113	19501A0556	Mr. G. G Bhargav	GenC Elevate	4.5LPA

114	19501A05C7	Ms. M. Sandhya Rani	GenC Elevate	4.5LPA
115	19501A05D1	Ms. G. Navya Deepthi	GenC Elevate	4.5LPA
116	19501A05D8	Mr. Rohit	GenC Elevate	4.5LPA
117	19501A05E3	Ms. P. Divyasri	GenC Elevate	4.5LPA
118	19501A05H5	Mr. S Karthik	GenC Elevate	4.5LPA
119	19501A05I2	Mr. T. Naveen	GenC Elevate	4.5LPA
120	19501A0503	Mr. A. Srinath Reddy	Tech Mahindra	3.25 LPA
121	19501A0509	Ms. A. Kavya Mohana	Tech Mahindra	3.25 LPA
122	19501A0558	Mr. Gayazuddin Siddique Baig	Tech Mahindra	3.25 LPA
123	19501A0563	Mr. G. Siri Sai Sri ram	Tech Mahindra	3.25 LPA
124	19501A0565	Mr. G sri Sravani	Tech Mahindra	3.25 LPA
125	19501A05C7	Ms. M. Sandhya Rani	Tech Mahindra	3.25 LPA
126	19501A05D4	Mr. N. Jaya Lakshmi	Tech Mahindra	3.25 LPA
127	19501A05D7	Mr. P. Sai Chaitanya	Tech Mahindra	3.25 LPA
128	19501A05D9	Ms. P.Sowmya Sri	Tech Mahindra	3.25 LPA
129	19501A0561	Ms. G. Vimala Keerthi	CTC	6 LPA (Internship 20,000)
130	19501A05D4	Ms. N. Jaya Lakshmi	CTC	6 LPA
131	19501A05C7	Ms. M. Sandhya Rani	CTC	6 LPA
132	19501A0531	Ms. B. Chaitanya Sreya	CTC	6 LPA
133	19501A05B7	Ms. V. Manvitha	CTC	6 LPA

FOG COMPUTING

The "fog" is close to the ground, right where things are getting done. This approach seizes upon the dual problem of the proliferation of computing devices and the opportunity presented by the data those devices generate by locating certain resources and transactions at the edge of a network. By locating these closer to devices, rather than establishing in-cloud channels for utilization and storage, users aggregate bandwidth at access points such as routers. This in turn reduces the overall need for bandwidth, as less data can be transmitted away from data centers, across cloud channels and distances. Data storage is another important difference between cloud computing and fog computing. In fog computing less data demands immediate cloud storage, so users can instead subject data to strategic compilation and distribution rules designed to boost efficiency and reduce costs.

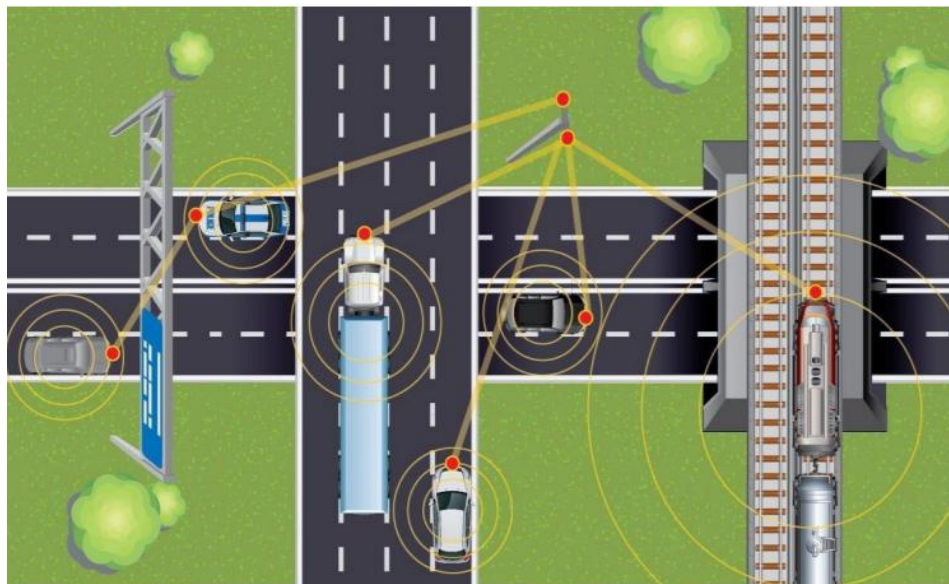
FOG COMPUTING CHARACTERISTICS

1. **Cognition:** Cognition is responsiveness to client centric objectives. Fog based data access and analytics give a better alert about customer requirements, best position handling for where to transmit, store, and control functions throughout cloud to the IoT continuum.
2. **Geographical Environment Distribution:** Fog computing environment has a widely circulated deployment in context to provide QoS for both mobiles and motionless end devices.
3. **Real-Time Interaction:** Real-time interaction is a variety and requirement of fog applications, like monitoring a critical process at oil rig with the fog edge devices or sensors, real-time transmission for traffic monitoring systems, electricity distribution monitoring system applications, and so on. Fog applications are having real-time processing capabilities for QoS rather than batch processing.
4. **Support for Mobility:** Mobility support is a vital fog computational advantage that can enable direct communication between mobile devices using SDN protocols (i.e., CISCO Locator/ID Separation Protocol) that decouples host identity from location identity with a dispersed indexing system.
5. **Edge Location with Low Latency:** The coming out smart applications services are inadequate due to the lack of support at the proximity of devices with featured QoS at the edge of the core network.

6. **Large Scale Sensor Network:** Fog has a feature applicable when environment monitoring system, in near smart grid applications, inherently extends its monitoring systems caused by hierarchical computing and storage resource requirements.
7. **Widespread Wireless Access:** In this scenario wireless access protocols (WAP) and cellular mobile gateways can be classical examples as fog node proximity to the end users.
8. **Interoperable Technology:** Fog components must be able to work in interoperating environment to guarantee support for wide range of services like data streaming and real-time processing for best data analyses and predictive decisions.

APPLICATIONS

Connected Cars: Fog computing is ideal for Connected Vehicles because real-time interactions will make communications between cars, access points and traffic lights as safe and efficient as possible. Fog computing will be the best option for all internet connected vehicles because fog computing gives real time interaction.



Connected Vehicles communicating each other

The system in a connected vehicle technology-based approach with Fog computing contains three layers which are the data generation, fog and cloud layer. The edge devices part of the data generation layer gathers sensory data and consume IoV services are the OBUs placed in the vehicles.

Smart Cities: Fog computing would be able to obtain sensor data on all levels, and integrate all the mutually independent network entities within. Energy networks use real-time data for the efficient management of systems. It is necessary to process the remote data near to the location where it is produced. It is also likely that data from multiple sensors will be produced. Fog computing is constructed in such a manner that all problems can be sorted.



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Fog Bus

- A Block chain-based Lightweight Framework for Edge and Fog Computing.

Introduction :-

Internet of Things (IoT) paradigm :

- ✧ Connects different sensors to the global Internet for exchanging data.

Cloud :

- ✧ The fundamental computing paradigm to deal with distributed IoT devices.
- ✧ When a large number of IoT devices simultaneously transferring the data to Cloud datacenters:
 - a. Network congestion occurs.
 - b. To overcome these limitations of Cloud-centric IoT model, Fog and Edge computing paradigms are emerged.
 - c. Prefer to utilize edge resources for executing real-time IoT applications

Potential edge resources :

- ✧ Smart devices with computing processors such as Raspberry Pi devices, personal computers, mobile phones, network switches, routers and micro-datacenters.

Fog computing :

- ✧ An intermediate layer between IoT enabled systems and Cloud computing.

Fog nodes :

- ✧ The computing instances of Fog computing
- ✧ Fog nodes are heterogeneous.

FogBusFramework :

Hardware Instruments :

IoT devices:

- ✧ Sensors that perceive the external environment
- ✧ Actuators that convert any given command to physical actions.

Fog Gateway Nodes (FGN):

- ✧ Entry points of distributed computing infrastructure.
- ✧ User interfaces of applications
- ✧ Data filtration
- ✧ Organize data in a general format.
- ✧ Aggregate the data received from different sources.

Fog Computational Nodes (FCN):

- ✧ FCNs are heterogeneous in terms of capacity and resource architecture.
- ✧ They are equipped with processing cores, memory, storage and bandwidth.
- ✧ Based on these operations, FCNs can act in three different roles:
 - a. **Broker nodes :**
 - ✓ Distributes the computational tasks over multiple FCNs and monitors, synchronizes and coordinates their activities.

b. General Computing Nodes (GCN):

- ✓ For general computing purposes and accessible via broker nodes.
- ✓ A general computing node can simultaneously serve multiple broker nodes.

c. Repository nodes:

- ✓ Manage distributed database to facilitate data sharing, replication, recovery and secured storage.
- ✓ Preserve some intermediate data during application execution

Cloud datacenters:

- ✧ When Fog infrastructure becomes overloaded.
- ✧ FogBus extends resources from Cloud datacenters to execute back-end IoT applications.

Software Component:

A. Broker Service :

a. Data Manager:

- ✓ Receives the sensed and preprocessed data from the IoT devices
- ✓ Aggregate data from multiple sources and calibrate data receiving frequency according to the context.

b. Cloud Integrator:

- ✓ All interactions of FogBus framework with Cloud are handled by Cloud Integrator.

B. Repository Service :

- a. Credential Archive:** Containing users authentication credentials
- b. Application Catalogue:** Maintaining the details including their operation, execution and programming model.
- c. Data Container:** Data received from IoT devices is stored in Data container so that it can be used for long term analysis
- d. Cloud Dilator:** This component facilitates other software components to interact with Cloud

C. Computing Services :

- a. Executor Security Manager:** The secured interactions of an FCN with others are managed by the Executor Security Manager.
- b. Resource Monitor :** Both busy and idle status of computing resources are monitored by this component.
- c. Application Executor :**
 - ✓ Allocates resources for different applications on corresponding FCN.
 - ✓ This component periodically informs the status of resources to the Resource Monitor.

Network Structure : *The FogBus networking should be secured, scalable and fault tolerant.*

A. Topology :

- ✧ *The master-worker topology is applied in designing the network structure for FogBus framework.*
- ✧ *Broker nodes are the masters*
- ✧ *Other FCNs function as the workers*
- ✧ *Being master, a broker node receives the data stream and user information from the FGNs and discovers workers for processing and storing them.*
- ✧ *To foster data sharing and reduce overhead from the masters, worker nodes also communicate among themselves under the explicit supervision of the masters.*

B. Scalability:

- ✧ *Scale-up the number of active Fog nodes according to context of the system.*
- ✧ *An FCN connected with the same WLAN can simply become a worker by making itself accessible to the corresponding master.*
- ✧ *The FogBus supports coexistence of multiple masters in a WLAN.*

C. Reliability:

- ✧ *The facility of running multiple masters implicitly eradicates the inherent single point failure limitation of master-worker model within FogBus.*
- ✧ *The framework allows each master to replicate their image over one of its worker nodes.*

A Case Study : Sleep Apnea Analysis

- ✧ *Sleep Apnea is a disease in which air stops flowing into the lungs for 10 seconds or even longer period of time during sleep.*
- ✧ *if oxygen saturation becomes significantly low for aged and asthma patients, Sleep Apnea could provoke brain stroke.*

To determine the intensity of Sleep Apnea, it is required to monitor oxygen saturation rate in blood time to time. If the intensity becomes higher than normal, it is recommended to consult with the Doctor before it occurs other complications

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