

# KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL (Accredited by NAAC with 'A' Grade) (An Autonomous Institute under Kakatiya University)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Networks)





News Letter

VOL-3

ISSUE-2 July 2024

#### **VIEWS**



It gives me immense pleasure that the Department of Computer Science and Engineering (Networks) is coming up with their second issue of their newsletter "SNIPER". I appreciate the enthusiastic effort made by the Editorial board, staff and the students to bring out this issue and all the hard work they put in. We believe in working hard to foster a culture that is always focused on doing what is best for students and ensuring that they have a positive educational experience that will transform them into good engineers and good human beings.

Dr. K. Ashoka Reddy

Principal, KITSW



We are elated to release the second issue of newsletter of Department of Computer Science and Engineering (Networks), July 2024. In our newsletters, we periodically publish all the important events, activities of the students and faculty. The unique feature of this newsletter is that its designed and developed by our students. I thank all contributors including faculty, staff members and students for their valuable inputs.

Dr. V.Shankar

Professor Head of the department CSE(N)

#### **EDITORIAL BOARD**

Chief Editor: Dr.V. Shankar Professor, Head of the department CSE(N)

Editor-In-Charge: Mr. L. Sujith Kumar Associate Professor, Department of CSE(N)

#### **Faculty Editorial Board:**

T. Sruthi
Assistant Professor

P. Priyanka
Assistant Professor

#### **Students Editorial Board:**

P. Anoohya (B21CN062)

G. Sai Sumanth
(B22CN014)

# **CONTENTS**

| S.NO | TOPIC                                | Page No: |
|------|--------------------------------------|----------|
| 1.   | VISION AND MISSION OF THE DEPARTMENT | 4        |
| 2.   | COURSE OFFERED                       | 5        |
| 3.   | PEOs, POs & PSOs- FOR UG             | 6-7      |
| 4.   | LIST OF FACULTY                      | 8-11     |
| 5.   | FACULTY ACHIEVEMENTS                 | 12-14    |
| 6.   | STUDENT ACHIEVEMENTS                 | 15-16    |

#### **VIEWS**



#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL

(An Autonomous Institute under Kakatiya University, Warangal)
(Accredited by NAAC with 'A' Grade)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Networks)

#### **VISION**

Attaining centre of excellence status in various fields of Computer Science and Engineering (Networks) by offering worth full education, training and research to improve quality of software services for ever growing needs of the industry and society.

#### **MISSION**

- Practice qualitative approach and standards to provide students better understanding and profound knowledge in the fundamentals and concepts of computer science with its allied disciplines.
- Motivate students in continuous learning to enhance their technical, communicational, and managerial skills to make them competent and cope with the latest trends, technologies, and improvements in computer science to have a successful career with professional ethics.
- Involve students in analyze, design and experimenting with contemporary research problems in computer science to impact socio-economic, political and environmental aspects of the globe.

## **COURSES OFFERED**

### B.Tech. Computer Science & Engineering (Networks)

Scheme of Instruction and Evaluation under URR-18 for 2021 Admitted Batch, for 2019, 2020 Admitted Batches

Syllabus under URR-18

### B.Tech. - Computer Science & Engineering (IoT)

Scheme of Instruction and Evaluation under URR-18 for 2021 Admitted Batch, for 2020 Admitted Batch

Syllabus under URR-18

#### Program Educational Objectives (PEOs): B.Tech

**PEO1: Technical Expertise**, apply the fundamental knowledge of the core courses of computer science and networks for developing the effective software and network technology solutions

**PEO2: Successful Career excel in profession**, higher education and entrepreneurship with updated technologies in software, computer networks and security based domains

**PEO3: Soft Skills and Life Long Learning**, exhibit professional ethics, effective communication and team work in solving engineering problems by adapting contemporary research towards sustainable development of society

## Program Specific Outcomes (PSOs): B.Tech

#### PSO<sub>1</sub>

Apply the fundamental knowledge of computer science and engineering in developing effective software for real world complex engineering problems adapting advanced technologies

#### PSO<sub>2</sub>

Design computer networks protocols and configure solutions for various network applications using contemporary hardware and software tools

#### PSO<sub>3</sub>

Implement effective securities standards and investigate efficiency of existing security measures by continuous adaptation of latest updates in cyber security domains

#### Program Outcomes (POs): B.Tech

PO1:Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2:Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3:Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4:Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5:Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern enginerring and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6:The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issuesand the consequent responsibilities relevant to the professional engineering practice.

PO7:Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8:Ethics: Apply ethical principles and commit to professional ethics and repsonsibilities and norms of the engineering practice.

PO9:Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10:Communication: Comunicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the enginering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidiciplinary environments.

PO12:Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## Department of Computer Science & Engineering(Networks)

Head of the Department

(w.e.f: 05.01.2022)

Dr. S.Narasimha Reddy Associate Professor

| S.NO | Name                       | Qualification<br>(specialization) | Designation /<br>Affiliation  | Research Area  | Email ID                                    |
|------|----------------------------|-----------------------------------|-------------------------------|--|---|
| 1.   | Dr. V.Shankar              | Ph.D.                             | Professor                     | Data Mining  | vs.csn@kitsw.ac.in                          |
| 2.   | Dr. S.Narasimha<br>Reddy   | Ph.D.                             | Associate Professor<br>& Head | Computer Vision and<br>Image Processing<br>(AI & ML) | snr.csn@kitsw.ac.in,<br>hod.csn@kitsw.ac.in |
| 3.   | Dr. A. Jothi<br>Prabha     | Ph.D                              | Associate Professor           | Machine Learning and Deep Learning                   | ajp.csn@kitsw.ac.in                         |
| 4.   | Dr. V. Swathy              | Ph.D                              | Associate Professor           | Software Engineering                                 | vst.csn@kitsw.ac.in                         |
| 5.   | Sri B. Srinivas            | M.Tech., (Ph.D.)                  | Assistant Professor           | Big Data Analytics                                   | bs.csn@kitsw.ac.in                          |
| 6.   | Dr. B. Hanumanthu          | Ph.D.                             | Assistant Professor           | Data Analytics                                       | bh.csn@kitsw.ac.in                          |
| 7.   | Sri I. Sai Rama<br>Krishna | M.Tech(Ph.D)                      | Assistant Professor           | Natural Language<br>Processing                       | srk.csn@kitsw.ac.in                         |
| 8.   | Dr. Kumar Dorthi           | Ph.D.                             | Assistant Professor           | Wireless Sensor<br>Network                           | drkumar.csn@kitsw.ac.in                     |
| 9.   | Dr. S. Kiran               | Ph.D                              | Assistant Professor           | Internet of Things                                   | sk.csn@kitsw.ac.in                          |

| S.NO | Name                         | Qualification (specialization) | Designation /<br>Affiliation | Research Area                                      | Email ID                          |
|------|------------------------------|--------------------------------|------------------------------|--|-----------------------------------|
| 10.  | Dr. A. Godavari              | Ph.D                           | Assistant Professor          | Cloud Computing,<br>Distributed Systems            | ag.csn@kitsw.ac.in                |
| 11.  | Mrs. R. Swetha               | M.Tech.                        | Assistant Professor          | Machine Learning                                   | swetharevoori.csn<br>@kitsw.ac.in |
| 12.  | Sri D. Ramesh                | M.Tech(Ph.D)                   | Assistant Professor          | Data Science, IoT,<br>Networks                     | dr.csn@kitsw.ac.in                |
| 13.  | Mrs. E. Rajitha              | M.Tech(Ph.D)                   | Assistant Professor          | Computer Vision and<br>Image Processing<br>(AI&ML) | er.csn@kitsw.ac.in                |
| 14.  | Ms. E. Vishnu<br>Priya Reddy | M.Tech., (Ph.D)                | Assistant Professor          | Internet of Things,<br>Deep Learning               | evp.csn@kitsw.ac.in               |
| 15.  | Ms. S. Divya                 | M.Tech                         | Assistant Professor          | Machine Learning, Data Science, Internet of Things | sd.csn@kitsw.ac.in                |
| 16.  | Ms. Md. Safiya               | M.Tech                         | Assistant Professor          | Machine Learning,<br>Data Science                  | safiya.csn@kitsw.ac.in            |
| 17.  | Ms. M. Hithasri              | M.Tech                         | Assistant Professor          | Machine Learning,<br>Data Science                  | hithasri.csn@<br>kitsw.ac.in      |
| 18.  | Dr. A. Kiran Mayee           | Ph.D                           | Associate professor          | Natural Language<br>Processing                     | km.csn@<br>kitsw.ac.in            |
| 19.  | Sri S.Ravi                   | M.Tech.                        | Assistant Professor          | Network  | ravi.csn@<br>kitsw.ac.in          |

| S.NO | Name                   | Qualification (specialization) | Designation /<br>Affiliation | Research Area                            | Email ID                    |
|------|------------------------|--------------------------------|------------------------------|--|-----------------------------|
| 20.  | Sri.M.Rama Rao         | M.Tech                         | Assistant Professor          | Machine Learning                         | ramarao.csn@<br>kitsw.ac.in |
| 21.  | Smt.V.Prashanthi       | M.Tech                         | Assistant Professor          | Software Engineering                     | vp.csn@kitsw.ac.in          |
| 22.  | Mrs. D. Haritha        | M.Tech                         | Assistant Professor          | Machine Learning,<br>Data Science        | haritha.csn@<br>kitsw.ac.in |
| 23.  | Dr.S.Raghu             | Ph.D                           | Assistant Professor          | Deep Learning,<br>Image processing       | sr.csn@kitsw.ac.in          |
| 24.  | Sri.Ch.Jayanth<br>babu | M.Tech                         | Assistant Professor          | Network & cryptogrphy                    | cjb.csn@kitsw.ac.in         |
| 25.  | Sri. K.Ravi Kanth      | M.Tech                         | Assistant Professor          | Blockchain<br>&distributed<br>Technology | krk.csn@kitsw.ac.in         |
| 26.  | Smt. P.Priyanka        | M.Tech                         | Assistant Professor          | Networks                                 | pp.csn@kitsw.ac.in          |
| 27.  | Smt. K.Shruthi         | M.Tech                         | Assistant Professor          | Machine Learning                         | ks.csn@<br>kitsw.ac.in      |
| 28.  | Smt. M.Susmitha        | M.Tech                         | Assistant Professor          | Network                                  | ms.csn@<br>kitsw.ac.in      |
| 29.  | Dr. P.Suma             | Ph.D.                          | Assistant Professor          | Adhoc Networks                           | suma.csn@<br>kitsw.ac.in    |

| S.NO | Name                     | Qualification (specialization) | Designation /<br>Affiliation | Research Area                    | Email ID                     |
|------|--------------------------|--------------------------------|------------------------------|----------------------------------|------------------------------|
| 30.  | Sri B.Ramji              | M.Tech                         | Assistant Professor          | Machine Learning                 | br.csn@kitsw.ac.in           |
| 31.  | Sri V.Srinivas           | M.Tech                         | Assistant Professor          | Network                          | srinivas.csn@<br>kitsw.ac.in |
| 32.  | Smt. M.Shirisha          | M.Tech                         | Assistant Professor          | Data Mining,<br>Machine Learning | shirisha.csn@<br>kitsw.ac.in |
| 33.  | Smt. B.Manoja<br>Rani    | M.Tech                         | Assistant Professor          | Machine Learning                 | vp.csn@kitsw.ac.in           |
| 34.  | Smt. M.<br>Priyadarshini | M.Tech                         | Assistant Professor          | Data mining                      | mp.csn@<br>kitsw.ac.in       |
| 35.  | Sri J.Satish             | M.Tech                         | Assistant Professor          | Network                          | sr.csn@kitsw.ac.in           |

#### **FACULTY ACHIEVEMENTS**

#### Scopus Reasearch Papers

Name of the faculty/faculties: Dr. S. Venkatramulu ,Dr. V. Chandra Shekar Rao

Title of Paper: Violation of Traffic Rules and Detection of Sign Boards,"

Name of journal: International Journal on Recent and Innovation Trends in Computing and

Communication

Year of publication: Aug. 2023

Link to the recognition in UGC enlistment of the Journal: https://doi.org/10.17762/ijritcc.v11i8s.7204.

Name of the faculty/faculties: Dr.A.Godavari

Title of Paper: Dynamic adaptive resource allocation for edge computing in big data analytics using gbdt,

dqn, and ga algorithms

Name of journal: Journal of Electrical Systems

Year of publication: Apr. 2024

Link to the recognition in UGC enlistment of the Journal: https://doi.org/10.52783/jes.2561

Name of the faculty/faculties: Dr. S. Venkatramulu, Dr. V. Chandra Shekar Rao

Title of Paper: Violation of Traffic Rules and Detection of Sign Boards

Name of journal: International Journal on Recent and Innovation Trends in Computing and

Communication

Year of publication: Aug. 2023.

Link to the recognition in UGC enlistment of the Journal: DOI:10.17762/ijritcc.v11i8s.7204

Name of the faculty/faculties: Dr. A. Kiranmayee

Title of Paper: Enhanced Routing Protocol in Mobile Ad hoc Network for Improving the Performance

Name of journal: Journal of theoretical and Applied Information Technology

Year of publication: Feb. 2024.

Link to the recognition in UGC enlistment of the Journal: http://www.jatit.org/volumes/vol102No14.pdf

#### Scopus Reasearch Papers

Name of the faculty/faculties: D.Ramesh

Title of Paper: Dengue symptoms classification analysis with improved conditional probability decision

analysis

Name of journal: IApplied Nanoscience

Year of publication: Feb-2022

Link to the recognition in UGC enlistment of the Journal: https://doi.org/10.1007/s13204-022-02387-9.

.

Name of the faculty/faculties: Dr.D.Kumar , Dr.S.Swathy

Title of Paper: Exploring human resource management intelligence practices using machine learning

models

Name of journal: The Journal of High Technology Management Research

Year of publication: Nov. 2023

Link to the recognition in UGC enlistment of the Journal: https://doi.org/10.1016/j.hitech.2023.100466.

Name of the faculty/faculties: Dr.B.Hanmanthu

Title of Paper: Brain tumor image identification and classification on the internet of medical things using

deep learning

Name of journal: Measurement. Sensors

Year of publication: Dec-2023

Link to the recognition in UGC enlistment of the Journal: doi.org/10.1016/j.measen.2023.100905

Name of the faculty/faculties: Dr.D.Kumar

Title of Paper: Integrated Slope Monitoring System for Slope Stability Over Old Underground Galleries

During Surface Mining Operations Using Internet of Things

Name of journal: Geotechnical and Geological Engineering,

Year of publication: Dec-2022

Link to the recognition in UGC enlistment of the Journal: https://doi.org/10.1007/s10706-022-02369-2.

#### Book chapters

Name of the faculty: Dr.P.Suma

Book chapter Name: Enhanced deep learning networks for advanced intrusion detection and prevention system

Book Name: Industry 6.0

Publisher Name: Taylor & Francic group

Year of publication: 2024

PublicationLink:

https://www.taylorfrancis.com/chapters/edit/10.1201/9781003517993-6/enhanced-deep-learning-networks-adv anced-intrusion-detection-prevention-systems-rekha-gangula-suma-patra-nata-sheker-reddy-miriyala

Name of the faculty: Dr. B. Hanumanthu

Book chapter Name: Data Science for Beginners

**Book Name**: Data Science for Beginners

Publisher Name: AASAN Year of publication: 2023

Publication Link: : https://aasans.com/books.html

Name of the faculty: Dr. A. Jothiprabha

Book chapter Name: An Efficient Machine Learning Model for Prediction of Dyslexia from Eye Fixation

**Events** 

**Book Name**: New Approaches in Engineering Research Vol. 10

Publisher Name: BP International

Year of publication: 2021

**Publication Link:** : https://doi.org/10.9734/bpi/naer/v10/11914D

## STUDENTS ACHIEVEMENTS

## ARTICLE

Name of the student: Amitha Ramadasu (B21CN019)

Title of the Article: UNIFIED SMART INTERFACE FOR DYNAMIC BLOOD BANK OPTIMIZATION About the Article: The Unified Smart Interface for Dynamic Blood Bank Optimization is a web application designed to enhance blood bank operations. It provides real-time tracking of blood availability, allows donors to register and donate blood, and enables users to find the nearest blood banks using GPS. The system optimizes blood transportation by calculating the fastest routes, minimizing delays, and offering a blood request feature. With a user-friendly interface for donors, recipients, and blood bank administrators, it streamlines inventory management and logistics. The solution aims to save lives by improving blood delivery speed, reducing shortages and enhancing overall blood bank efficiency, making it a valuable tool for healthcare systems and communities.

#### Objectives:

- To develop a user-friendly platform that allows users to easily access the important information such as available blood types and easily locate the nearest blood banks.
- Real-time tracking and visualization of blood bank's location using google maps, that enables users to easily locate the nearest blood banks on their geographical location and access the blood supplies as earliest possible.
- Advancement in the existing blood bank management system, developing the advanced administrative tools for blood bank management like inventory, tracking the donations, response to the donation requests efficiently.
- Integrating the real time updates on donation requests, blood availability to facilitate timely information for the recipients and the donorsbased on their location and blood compatibility.

#### Novelty:

- 1.Location Based Services Integration.
- 2. Delivery Service Integration
- 3.Smart Notification System

#### Conclusion:

Unified Smart Interface for Dynamic Blood Bank Optimization presents a transformative idea to blood bank management, the main focus of attention is to provide blood access to the needy as earliest as possible in emergency situations, combining advanced technologies to enhance efficiency, effectiveness and accessibility. With integration of geolocation services, user-friendly interfaces, this system facilitates efficient blood donation process and improve healthcare outcomes.

#### STUDENT CONFERENCES

Name of the student: Netha sridatta(B19CN002), Nishikanth annamaneni(B19CN001)

Name of the faculty guided: Dr.V.Shankar, Dr.B.Hanumanthu

Title of the conference: 1st International Conference on Optimization Technique uses

for Learning(ICOTL'23)

Year: 2023

Host institution/organization: Madanapalle Institute of Technology and Science,

Chittor, AP

link to publish conference paper: Effective Contact Tracing of CovidPatients Using.

MachineLearningTechniqueIEEE ConferencePublicationIEEE Xplore.

Name of the student: Nishikanth Annamaneni(B19CN001)

Name of the faculty guided: Dr.V.Shankar, Dr.B.Hanumanthu

Title of the conference: 1st International Conference on Optimization Technique uses

for Learning(ICOTL'23)

Year: 2023

Host institution/organization: Madanapalle Institute of Technology and Science,

Chittor, AP

link to publish conference paper: : Voice Based Assistance About Surrrounding of blind an

| IEEE Conferebce publication | IEEE Xplore.