

APRIL 2023 EDITION

CSE

COMPUTER SAMWAD A publication of the Sagar Institute of Research ප Technology Computer Science and Engineering Department



Department of Computer Science & Engineering Department of Computer Science & Information Technology Department of Computer Applications

3rd National Conference on

Advances in Information, Science & Technology - 2K23 (AIST2K23)

Conference Chair Dr. Rajiv Srivastava Director, SIRT Bhopal

Organizing Chair Dr. Ritu Shrivastava Dr. Aumreesh Saxena Dr. Jay Kumar Jain

Program Chair Dr. Kapil Chaturvedi 79875 68980 Dr. Amit Shrivastava 7024140521 Dr. Anupama Jain 9425150264 Prof. Rajiv Saxena 9826786303



National conference on "Advances In Science & Technology 2K23" was organized by Department of CSE. The Department of Computer Science & Engineering is one of the core Department of SIRT and was established in 2003 to initially offer Bachelor of Engineering degree in Computer Science & Engineering. Keeping in view the dynamic nature of growth in the industry and the increasing demand for IT professionals, later the Department has started a postgraduate program to offer Masters of Technology.

VISION

To motivate and mould students into world class Computer Science and Engineering professionals who will excel in their field and effectively meet challenges of the dynamic global scenario

MISSION

- To achieve academic excellence in providing technical education by incorporating the principles of Total Quality Management (TQM).
- To provide state-of-art infrastructure for enhanced learning & research with IT based knowledge management to meet global challenges.
- To inculcate ethical, moral, & cultural values among Computer Science & Engineering professionals.

STUDENT'S ACHIEVEMENT

- Ritesh Singh, Ritik Pillai, Priyanshu Patil, Samyak Jain of 6th semester, CSE Department, participated in an offline hackathon of Rajasthan Government which took palce in Jaipur from March 19th to March 24th, 2023.
- Saumya Kumar and Warshit Poonia of 6th semester, CSE Department, passed the exam Certified APPSEC Practioner(CAP) with merit.
- Richika Rajoria & Shashank Prajapati of 6th semester, CSE Department, was selected as Technical Intern of Sambhav Initiative and received certificate of appreciation from Gujrat state Legal service Authority.



WORKSHOPS



Department of Computer Science and Engineering, SIRT, Bhopal conducted 1 day Workshop on "Web Technology", the workshop was organized by Prof. Monika Kherajani and Prof. Prachi Sharma on 5th April 2023.

VOICE

A Message from the Department Chair



Established in 2003 as the Department of Computer Science & Engineering, we have an excellent & rich history and an outstanding record of contributions to the profession and community. The Department is well recognized for excellence in facilities and teaching.

At Present, the Department offers B.Tech. in Computer Science & Engineering and M. Tech. in Computer Science & Engineering.

The aim of these programmes is to enable students to acquire specialized knowledge for various subjects in computer science, as well as to enrich the students personal, social and cognitive development to meet challenges of today and tomorrow. The Department is well equipped with high end computers, latest software & state- of-the-art IT infrastructure and all these computing resources are interconnected with high speed intranet. Our students exposed to up-to-date are curriculum, technology and techniques. The Department has well experienced & dedicated facultv members with different specializations.

Our faculty is involved in cutting- edge research areas, including Machine learning, Data Science, Cloud Computing, computer networks and artificial intelligence. The Department prides itself on good career opportunities for students. Our students graduate with more than 100% placement through campus. Many companies of repute show their interest to visit our Institute for campus recruitment.

VALUE ADDITION COURSE





2 days VAC on "Computer Networking and Cyber Security" was organized by Prof. Chetan Gupta , Prof. Sonam Dubey, Prof. Anjali Vishwakarma.

1 day VAC on "Android App Development without coding" was organized by Prof. Arun Jhapate Aand Prof. Ashish Chaure on 24th April 2023.

Yours, Dr Ritu Shrivastava Professor & Head

SEMINARS





·Seminar on "Latest Technology trends in Data Science" was organized by Prof. Chetan Gupta , Prof. Sonam Dubey, Prof. Anjali Vishwakarma, Prof. Ankita Awasthi.

Seminar on "Identifying IPR Component at early stage of Innovation" was organized by Ms. Harshita Jain, Ms. Kiran Pachlasiya and Ms. Reshma Jain under IIC quarterly activities.

FACULTY ACCOLADES

PAPER PUBLICATION

•Prof. Chetan Gupta published a paper entitle "Random Key Generation Based Double Image Encryption System" in International Conference on Electrical, Electronics and Computer Sciences (SCEECS) IEEE CONFERENCE 2023 in MANIT Bhopal.

·Prof. Harshita Jain has published a book chapter for "Intelligent Sensor Node Based system" under Taylor and Francis series (CRC Press).

•Prof. Harshita Jain has published a paper on "Security and laws of Cyber/ Cloud Computing" in IJSRD, a peer reviewed UGC Journal.

COPYRIGHT FILED

Dr. Ritu Shrivastava, Dr. Kapil Chaturvedi, and Prof. Sonam Dubey filed a copyright on "An efficient Image Encryption Method with RGB".

•Prof. Harshita Jain has filed one copyright on "Proposed methodology to enhance professional decision making power" with Prof. Kiran Pachlasiya.

FACULTY ACCOLADES

CERTIFICATION



Rupali Chaure completed FDP on Cyber security held by E & ICT Academy , IIT Kanpur.



•Dr,Mohit singh Tomar completed 2 FDPs on "Advanced Excel withdata Visualization" and "Cyber Security" held by E & ICT Academy, IIT Kanpur.



•Ms. Harshita Jain was selected as a technical coordinator was of Sambhav Initiative and received certificate of appreciation from Gujrat state Legal service Authority for working towards ADR.

PATENT PUBLICATION



•Dr. Jaydeep Patel became a editorial Board member for BOHR Journals". He also published an Indian Patent "IOT Based biogas leakage detecting device".

BOOK CHAPTER PUBLICATION



Prof. Kiran Pachlasiya published one book chapter for the book: "Smart Urban Computing Applications"

Prof. Harshita Jain has published a book chapter for "Intelligent Sensor Node Based system" under Taylor and Francis series (CRC Press).

FACULTY ACCOLADES REVIEWERS



Dr. Jaideep Patel received reviewer certificate for IDEA 2K23conference.

Ms.Harshita Jain reviewed the paper for conference ICECCME'23 which will be held in the Canary Islands, Tenerife, Spain between 19-20 July 2023.

Prof. Shubham Gangrade, Dr.Kapil Chaturvedi,Prof. Ankita Awasthi, Prof. Brij Mohan Sharma, Prof. Ashutosh Pandey and Dr.Vijay Bhandari published a paper on "Review : Cloud Computing and Internet of things Play Vital Role in SMART Stadium" in IJSRET, a peer reviewed UGC Journal.

•Prof. Chetan Gupta reviewed a paper entitled Bibliometric Analysis in Control of Mining Processes using Vos viewer and Biblio metrix of International Journal of Recent Technology and Engineering (IJRTE).

·Prof. Chetan Gupta becomes a Reviewer board member in International Association of Engineer (IAENG) 2023.

·Prof. Chetan Gupta becomes a Technical Program Committee member in, Springer book series "Data-Intensive Research" International Conference on Data Science and Big Data Analysis IDBA-ACMWIR-2023.

Prof. Chetan Gupta reviewed a paper entitled MDCNet: A Multiple Dilated Convolution Network for cell Nuclei Segmentation of International Journal of Recent Technology and Engineering (IJRTE).

Prof. Monika Khejarani received certificate of appreciation for coordinating Sage Winter School ,January 2023 on " IOT with edge ML"

PROGRAM OUTCOMES

Engineering Graduates will be able to:

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 engineering and IT tools including prediction and modeling 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 issues and 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 responsibilities 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: Communicate 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 engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary 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.

PROGRAM EDUCATIONAL OUTCOME

PEO1: Graduates shall have fundamental and advanced knowledge in mathematics, science, Computer Engineering and inter disciplinary engineering to emerge as technocrats.

PEO2: Graduates shall have capabilities to develop software, understand the technical specification, design and provide innovative solutions for society by diligence, team work and lifelong learning.

PEO3: Graduate shall have good communication skill, leadership skill, professional and ethical values.

PEO4: To equip graduates with the ability to get employed in industries or pursue higher studies or turn as researchers or entrepreneurs.

PROGRAM SPECIFIC OUTCOME

PSO1: Demonstrate understanding of the principles and working of the hardware and software aspects of computer systems.

PSO2: Ability to understand the structure and development methodologies of software systems. Possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.

PSO3: Ability to work in team and apply the knowledge acquired to develop new real life systems and able to adapt to societal needs of future.



Prof. Chetan was included in Elite Member Group 2k23

EDITORS

STUDENT EDITORS

Prof. Prachi Sharma, Assistant Professor, CSE.SIRT Anushree Gupta VII Sem CSE Sahil Shrivastava VII Sem CSE