



ISSN 2455-071X



Estd. 2001

Tech Tonics

TIMSCDR Student Research Journal

Volume 18

2022-2023



Thakur Educational Trust's (Regd.)

Thakur Institute of Management Studies, Career Development & Research

Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai

ISO 9001 : 2015 Certified • MCA Program Accredited by National Board of Accreditation (NBA)

Institute Accredited with A+ Grade by National Assessment and Accreditation Council (NAAC)

TECH TONICS: TIMSCDR Student Research Journal
ISSN : 2455-071X

EDITORIAL BOARD

Editor-in-Chief

Dr. Vinita Gaikwad

Editorial Board Members

Dr. Padma Mishra

Ms. Thara C.

Student Members

Utkarsha Nataalkar

Himanshi Pandey

Nihar Rathod

Sangeeta Patel

Sarvesh Rathod

Disha Rai

Vedangi Raut

Ashish Prajapati

Vivek Shukla

Ashvin Aruldas Shetty

Muskan Akbar Ali

Neelu kawat Bhagirathi

Ariba Akhtar

PUBLISHER

Thakur Institute of Management Studies, Career Development & Research
Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village,
Kandivali (E), Mumbai – 400 101

Telephone: 022 - 2884 0484/91, 022 - 67308301/02

Fax: 022 – 28852527

Email: timsedr@thakureducation.org

Website: www.timsedrmbai.in

AIM

The research and development is transforming the computing paradigms and technology in multidimensional directions. Tech Tonics aims to inculcate research culture among post graduate students and make them aware of new innovations happenings in the field of information technology.

TECH TONICS

TIMSCDR Student Research Journal

Volume 18
Academic Year: 2022-2023

Published By

Thakur Institute of Management Studies, Career Development & Research
Thakur Educational Campus, Shyamnarayan Thakur Marg,
Thakur Village, Kandivali (E), Mumbai – 400 101

Vision

Thakur Institute of Management Studies, Career Development & Research will become a premier institute renowned internationally for providing education in software application to graduates from various disciplines.

Mission

To achieve excellence in providing software education so that students can grasp existing as well as emerging technologies and to inculcate leadership and managerial qualities in them so that they can deliver results in the organization they join.

Quality Policy

We, the staff, faculty and management of Thakur Institute of Management Studies, Career Development and Research are committed to offer excellence in software education, conducive academic environment, and state-of-the-art infrastructure to our students.

We work as a team and interact with students in pro-active manner to achieve our Quality Objectives and fulfill all academic, statutory, and regulatory requirements to entire satisfaction of our students as well as for continual improvement of QMS.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO-1 :** To enable students to gain knowledge across all domains of Information Technology with in-depth understanding of their applications.
- PEO-2 :** To enable students to analyze problems and to design and develop software solutions using emerging tools and technologies.
- PEO-3 :** To enable students to continue Life-long learning, Research and Entrepreneurial pursuit in their chosen fields.
- PEO-4 :** To develop communication, teamwork, and leadership skills necessary to manage multidisciplinary projects and serve the society as responsible and ethical software professionals.

PROGRAM OUTCOMES (POs)

1. **Computational Knowledge** - Apply domain specific knowledge of computing and mathematics for designing of software solutions for defined problems and requirements.
2. **Problem Analysis** - Understand and analyze a problem and suggest feasible solutions.
3. **Design/ Development of Solution** - Design, evaluate, and develop effective solutions for complex computing problems to meet desired needs.
4. **Conduct investigation of complex computing problems** - Design and conduct experiments and use research-based methods to investigate complex computing problems.
5. **Modern tools usage** - Use appropriate techniques and software tools for computing activities.
6. **Professional Ethics** - Understand and commit to professional norms, regulations and ethics.
7. **Lifelong Learning** - Recognize the need for and have the ability to engage in independent learning for continual professional development.
8. **Project management and finance** - Understand and apply project management principles, as a member or leader in multidisciplinary environments.
9. **Communication Efficacy** - Effectively communicate technical information, both oral and written with range of audience.
10. **Societal & Environmental Concern** - Analyze societal, environmental, cultural, and legal issues within local and global contexts when providing software solutions.
11. **Individual and Teamwork** - Work as a member or leader in diverse teams in multidisciplinary environments.
12. **Innovation and Entrepreneurship** - Use Innovation and Entrepreneurship for creation of value and wealth.

Editorial

The eighteen volume of the Institute Research Journal, Tech Tonics 18 is a compilation of scholarly research papers and articles written by students of MCA (Master of Computer Applications) course of TIMSCDR. The contents of the research papers and articles of this edition pertain to the application of Information Technology in various domains such as Agriculture, Medicine, Big Data, IoT, Digital Marketing etc.

The Journal showcases the research endeavors of Post Graduate level students in the area of their interest. The students got an opportunity to understand the relevance of standard research work through this academic exercise.

The eighteen edition of Tech Tonics, Research Journal is a modest effort to encourage the young, enthusiastic and resourceful minds of the students to do research using latest techniques and innovate and pen down emerging ideas in the field of Information Technology and its diverse Applications.

Editor-in-Chief

Dr. Vinita Gaikwad

Director, TIMSCDR

Tech Tonics: TIMSCDR Student Research Journal, Volume 18

Research Papers/ Articles

1.	Review paper on Space Examination using BigData Ishant Jadhav, Om Pawar	1
2.	Gas Detection System for Wifi Network Proposed Using IOT Syed Shahid, Singh Shivam	8
3.	Proposed Framework for AIML Chatbot development to Support the Healthcare Sector Kunal Kolhe,Suraj Kharwar	12
4.	Proposed System for Contribution in Green India through Junakapdewala Kundan Yadav	15
5.	Study on Effect of Climate Change due to Emissions of Carbon Dioxide Harshika P. Naik	17
6.	The Impact of virtual reality on education Sumit Kumar Gaud	21
7.	RFID with the Arduino-UNO: A Proposed Framework for an Employee Availability System Deepak Kumar Vishwakarma,Sagar Vishwakarma	25
8.	Proposed Framework for smart services and time-sensitive applications using Cloud Based Edge Solutions. Ankit Rautela,Stanish Roy	29
9.	Study on Cyber Security-Ransomware attacks and its effective preventive measures Sahil Shetty,Hrithik Shinde	36
10.	Study on the Application of Blockchain Technology for Autonomous Vehicles Antima Laljeet Shah,Sujeet Ramashankar Yadav	41
11.	Proposed framework for GSM and GPS-based system for Autonomous Automobile Accidents Detection along with Alerting Himani Pandey	48
12.	Review paper on Impacts of agricultural methods on soil condition and emissions of carbon Gaurav Satish Singh	54
13.	A Review of Radioactive Waste Management Krishna Yadav	61
14.	Study on Cloud Computing and Green Cloud Computing Moksha Shah,Shivam Mishra	64
15.	Study on Growth of Cryptocurrency in India: Its Challenges Potential Impacts Legislation Shubham Sudhakar Dawange	71