



ISSN 2455-071X



Estd. 2001

Tech Tonics

TIMSCDR Student Research Journal

Volume 17
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)

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

Mr. Shirshendu Maitra

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 kewat 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 17
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 seventeen volume of the Institute Research Journal, Tech Tonics 17 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 seventeen 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 17

Research Papers/ Articles

1.	Online Donation Service Archin Joshi	1
2.	Relative Study of Machine Learning Algorithms for Twitter Sentiment Analysis Rameshwar Kharwa	5
3.	Leveraging Information Technology for Sustainability in Medicine in Covid 19 Crisis Namrata Digambar Patil, Akhilesh Indradev Pandey	10
4.	The Role of Machine Learning Algorithms for Diagnosing Diseases Anilkumar Yadav	15
5.	Impact of Covid-19 on IT Company Kamlesh Dayashankar Yadav, Dharmendra Kumar Ramji Vishwakarma	19
6.	Healthcare Chatbot using AIML Kunal Kolhe, Suraj Kharwar	22
7.	Augmented Reality in the Field of Health, Travel & Tourism During Covid-19 Pandemic Priscilla Kumaran, Mahendra Kompala	25
8.	SONAR Rock and Mine Prediction with Python Pratiksha Khadtare	31
9.	Study on Cloud Computing and Green Cloud Computing Moksha Shah, Shivam Mishra	35
10.	E-Waste Management in India Abhishek Omprakash Gupta, Rahul Ramsurat Gupta	44
11.	A Movie Recommender System: Using Machine Learning Mansi Patil, Riya Mishra	47
12.	Post Covid Education System Pratik Pankaj Vora, Rishabh Tiwari	50
13.	Analysis of Black Fungus Ayush Pravin Kothari, Shivam Vivek Kulkarni	54
14.	Impacts of Covid-19 on our Indian agricultural system and A strategy for post-pandemic Recovery Jagrit Pandey, Ashish Pandey	56
15.	Food Poisoning Detection System Karmesh Mishra, Saaj Sawant	60