

## ABOUT VIT

Vellore Institute of Technology (VIT) has made a mark in the field of higher education in India by providing quality education on par with institutions of international standards, in a cross-cultural ambience with extensive application-oriented research. VIT was founded in 1984 by Dr. G. Viswanathan, a former parliamentarian and Minister in the Tamil Nadu Government, as a self-financing institution called Vellore Engineering College. Since then, the institution has grown from strength to strength. Conferred the status of Deemed to be university in 2001 by MHRD, VIT currently offers UG, PG and Research programmes on its four campuses at Vellore, Chennai, Bhopal, and Amaravati. VIT Chennai is a globally engaged, competitive, comprehensive, and research-enriched university campus strategically positioned in the capital city of Tamil Nadu, to respond to major industrial, social, economic and environmental demands and challenges. VIT Chennai is ably spearheaded by the Vice Presidents Mr. Sankar Viswanathan, Dr. Sekar Viswanathan, Dr. G.V. Selvam, Executive Director Dr Sandhya Pentareddy, Assistant Vice President Ms. Kadhambari S. Viswanathan, and Dr. V. S. Kanchana Bhaaskaran, Vice Chancellor of VIT.

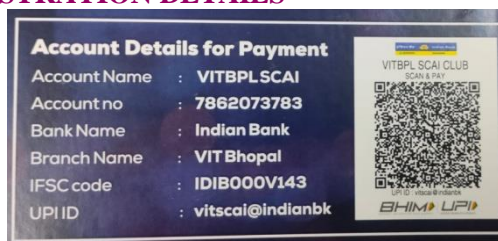
## ABOUT VIT BHOPAL

VIT Bhopal University, envisioned with a new global outlook will empower its aspirants to attain excellence through learning. The comprehensive teaching methodology designed by the University, redefines the approach to learning, educating and building knowledge-based societies in the country. Collaboration with reputed national and international organisations and strategic partnerships with universities around the world are being established, to prepare a globally competent generation of professionals.

## VIT Focus on:

- CALTech – Collaborative and Active Learning through Technology
- Fully Flexible Credit System (FFCS)<sup>TM</sup> empowers students with freedom to choose courses, faculty and pace of study
- Sophisticated laboratories actively engage students in acquiring practical knowledge of industrial standards
- First campus to provide unlimited internet access with state-of- the-art Wave 2 technology
- Mandatory Soft Skills training as part of curriculum for better placement prospects and professional skills
- Entrepreneurship Cell established to incubate innovative ideas and business models
- Hack-a-thons, Make-a-thons, Idea-thons integrated into the academic system
- Clubs, Student Chapters & Technical Associations actively engage students for all-round development
- Faculty Proctors for guidance in academic progress and personality development
- Spacious hostel accommodation, with well-equipped health and recreation amenities
- Modern facilities for sports, fitness and extra-curricular activities
- Student community from various states of India present a diverse cultural ambience on campus
- A flagship university that aligns with the ‘Swachh Bharat’ and ‘Make in India’ missions

## REGISTRATION DETAILS



## Two-Day National Level Workshop On MACHINE LEARNING AND DEEP LEARNING IN MEDICAL DATA ANALYTICS AND HEALTHCARE APPLICATIONS

**10 – 11 October 2024**

**Organized by**

**School of Computer Science Engineering  
and Artificial Intelligence (SCAI)**



**VIT – A place to learn; A chance to grow**

## ABOUT SCAI

School of Computing Science Engineering and Artificial Intelligence (SCAI) has started in 2024 with eleven programmes, including five under graduate, five post graduate programmes and one doctoral programme. The school has the students strength of 6243. The SCAI school is enriched with future ready programmes,

- B.Tech. Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- B.Tech. Computer Science and Engineering (Cyber Security and Digital Forensics)
- B.Tech. Computer Science and Engineering (Cloud Computing and Automation)
- B.Tech. Computer Science and Engineering (E-Commerce Technology)
- B.Tech. Computer Science and Engineering (Health Informatics)
- M.Tech. Artificial Intelligence and Data Science (2 years)
- M.Tech. CSE (Cyber Security and Digital Forensics) (2 years)
- Integrated M.Tech Computer Science and Engineering (Computational and Data Science) (Five Years)
- Integrated M.Tech Artificial Intelligence (Five Years)
- Integrated M.Tech Computer Science and Engineering (Cyber Security) (Five Years)
- Ph.D. Programmes.

## About Workshop

The workshop on Machine Learning (ML) and Deep Learning (DL) in Medical Data Analytics and Healthcare Applications aims to introduce participants to the transformative role of AI technologies in modern healthcare. ML and DL have become essential tools in processing complex medical data, enabling

advancements in diagnosis, treatment, and patient care.

This workshop will cover the fundamental concepts of ML and DL, with a focus on their practical applications in analyzing medical images, electronic health records (EHRs), and genetic data. Participants will explore how algorithms like convolutional neural networks (CNNs) and recurrent neural networks (RNNs) are used in tasks such as disease detection, prediction of patient outcomes, and personalized treatment planning. In addition to technical skills, the workshop will address the challenges of implementing AI in healthcare, including ethical concerns, data privacy, and ensuring unbiased results. This session is designed for healthcare professionals, researchers, and data scientists looking to leverage ML and DL to improve healthcare outcomes and drive innovation in medical practices

## Topics to be covered

- Data collection approaches from several sources for Machine Learning and Deep Learning models
- Machine Learning and Deep Learning models for Disease classification and prediction using images
- Recent Trends and Advancements in Healthcare Image Analytics
- Current and Future Impacts of Pandemics and Risk Mitigation in Healthcare
- AI and ML applications for health care
- Identification of heart defects from ECG signal using Explainable AI

## Expected Outcome

- Understanding of Data Collection Techniques
- Mastery of ML and DL Models for Disease Prediction
- Hands-on Experience with Healthcare Image Analytics

- Awareness of AI Applications in Healthcare Insights into the Future of Healthcare and Pandemics
- Identification of Heart Defects Using Explainable AI

## WHO SHALL ATTEND?

Academic professionals, research scholars, and students, both internal and external Participants, who are eager to share their insights and learn from experts.

## REGISTRATION FORM

<https://forms.gle/dgBE7wKcTs5rTygh9>

## REGISTRATION FEE

(Only Limited Registration)

- External Participants (Faculty and Student) – **Rs. 300**
- Internal Participants (Faculty and Student) – **Rs. 100**

## DATES TO REMEMBER

- Last date for applying: **3<sup>rd</sup> October 2024**
- Registration confirmation: **4<sup>th</sup> October 2024**

## FACULTY COORDINATORS

**Dr. Komarasamy G**

Senior Associate Professor, SCAI

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**Dr. Jothiaruna N**

Assistant Professor, SCAI

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## RESOURCE PERSONS

**Dr. Surendiran B**, NIT, Puducherry.

**Dr. Malaya Kumar Nath**, NIT, Puducherry.

**Dr. Senthil Kumar T**, Amrita University, Coimbatore.

**Dr. Kannimuthu S**, Karpagam College of Engineering, Coimbatore.