Sairam INSTITUTIONS

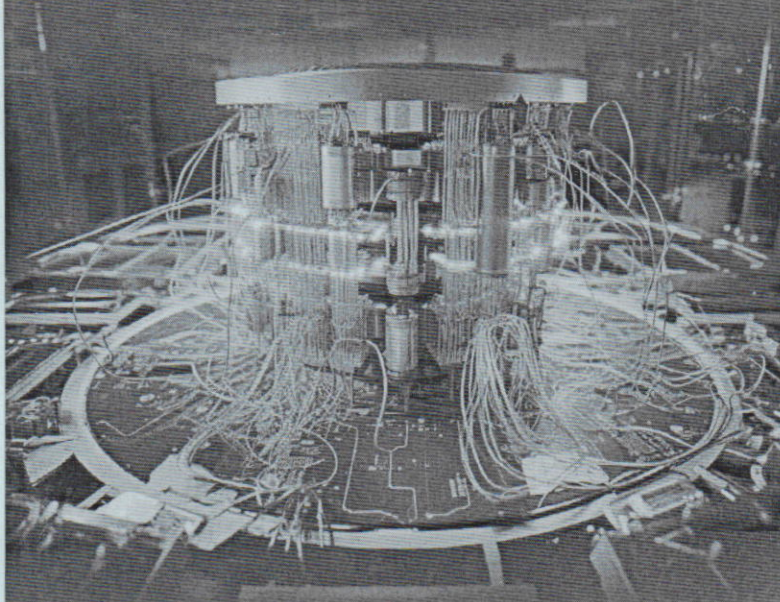## Department of Artificial Intelligence & Machine Learning

Organizing

5 Days Online National Faculty Development Programme on

"THE FOUNDATIONS AND FUTURE OF QUANTUM COMPUTING"

05.05.2025 to 09.05.2025

Sri SAIRAM COLLEGE OF ENGINEERING

Accredited by NBA & NAAC | An ISO 9001:2015 Certified Institution
Approved by AICTE, New Delhi & Affiliated to Visvesvaraya Technological University, Belgaum
Sai Leo Nagar, Anekal, Bengaluru - 562 106, Tel : +91-7377730030 www.sairamce.edu.in

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Chief Patron

Dr. Sai Prakash LeoMuthu
Chairman & CEO, Sairam Institutions

Patron

Dr. B. Shadaksharappa
Principal, SCE, Bengaluru

Session Details

Date : 05.05.2025 / Time : 10:00AM - 11:30 AM

Mrs. Sudha Thamotharan
Technical Project Manager, Octonomy, Chennai

Inaugural Address

Date : 05.05.2025 / Time : 11:30AM - 1:00PM

Dr. T. Subha
Associate Professor, NITTTR, Chennai

Topic: Introduction to Quantum mechanics: The Foundations of quantum computing

Date : 06.05.2025 / Time : 10:00AM - 11:30 AM

Mrs. Jaya Sundaresan
Packaged Application Assistant Manager

Topic: Classical vs Quantum Computing: An overview of quantum concepts

Date : 06.05.2025 / Time : 11:30AM - 1:00PM

Dr. S. Anathakumaran Reddy
Dean Academics VIT, Bhopal

Topic: Building blocks of quantum Computation

Date : 07.05.2025 / Time : 10:00AM - 11:30 AM

Dr. R. Leena Sri
Associate Professor, Thiagarajar College of Engineering, Madurai

Topic: Exploring quantum algorithms and edge computing frameworks

Date : 07.05.2025 / Time : 11:30AM - 1:00PM

Mr. P. Ramkumar
Asst. Prof. (AI&ML), SSCE, Bengaluru

Topic: Quantum computing applications in machine learning and optimization

Date : 08.05.025 / Time : 10:00AM - 11:30 AM

Dr. S. N. Deepa
Associate Professor, NIIT, Calicut

Topic: The Convergence of quantum and Edge computing: Future Possibilities

Date : 08.05.025 / Time : 11:30AM - 1:00PM

Dr. Sivaprakash. C
Prof & Head(AI&ML), SCE, Bengaluru

Topic: Quantum algorithms for solving real world problems

Date : 09.05.025 / Time : 10:00AM - 11:30 AM

Dr. V. Shanmuganeethi
Professor, NITTTR, Chennai

Topic: Future trends and research directions in quantum computing

Date : 09.05.025 / Time : 11:30AM - 1:00PM

Dr. R. Arunkumar
Chief Operating Officer, Sairam Instutions

Valedictory Address

About Sairam College of Engineering

Sri Sairam College of Engineering formerly ShirdiSai Engineering College, Bengaluru, established in the year 1997 by MJF.Ln .Leomuthu, Founder Chairman of Sapthagiri Educational Trust, is a non-profitable and non-minority institution. Located within the Bengaluru city limits, Sairam College is an inspirational place to study in which everything from classroom to laboratories, hostel to cafeteria are modernised with state-of-the art infrastructure. The labs and other facilities are among the best in the region making it one of the most sought after Institutions by parents and student. The Ultra-modern computer labs with latest software and hardware, and techno-visionary innovative centre make the institution learning heaven for enthusiastic young engineering spirants. ICT enabled class rooms and work areas are well furnished and equipped with modern up-to-date facilities

Sri Sairam College of Engineering has developed into a reputed Engineering Institution with ISO 9001: 2015 Certification. Offering top quality technical education and moulding the younger generation with the spirit of service to society, the management of the institution has spared no efforts to induct dedicated faculty and provide adequate infrastructure and facilities. The college is affiliated to the Visvesvaraya Technological University, approved by All India Council for Technical Education (AICTE); New Delhi, and accredited by Institution of Engineers (IEI). The college has many hats in its credit with university ranks, top rated engineering college in Karnataka, and various awards for its consistent and systematic upward performance.

Department of Artificial Intelligence and Machine Learning

We are starting our exciting journey in the year of 2021, with Artificial Intelligence and Machine learning Engineering. The primary focus of the course is to impart budding engineers with a spectacular array of courses dedicated to frontiers in the field of Artificial Intelligence and Machine Learning (AI and ML), promote their problem-solving skills and innovation of new technologies introducing new developments. The 4-year full-time program presents exposure to hands-on technologies to create applications and solutions for the world that we live in.

This special B.E Program is designed to enable students to build Intelligent Machines, Software, or Applications with a cutting-edge combination of Machine Learning, Analytics and Visualization technologies. The main goal of this course is to make the students capable to program the computers to use the data and experience to solve a given problem. Machine Learning helps Artificial Intelligent Systems to figure out solutions to problems by linking similar data for future use. There are many applications for Artificial Intelligence and Machine Learning, such as social media, healthcare, e-commerce, eather forecast, traffic monitoring, etc.

This program is meant for the students who want to acquire the ability to design intelligent solutions to problems in a variety of domains and business applications and fields such as natural language processing, text mining, robotics, reasoning and problem-solving. There is a big demand for professionals in the field of Artificial Intelligence, Data Analytics, Data Mining, Machine Learning or Deep Learning and data science in the near future.

Scan for Registration

No Registration Fee
Webex Link: https://surl.li/wdrezo

Certification
The FDP will be delivered through ONLINE mode and certificate will be provided to the registered Participants who have 80% attendance

https://forms.gle/bJxagdXqN7vVREtY6

About the FDP

The Faculty Development Programme (FDP) on "The Foundations and Future of Quantum Computing" is a comprehensive initiative designed to equip educators and researchers with the fundamental concepts and emerging trends in the rapidly evolving field of quantum computing. This program aims to bridge the gap between theoretical foundations and real-world applications by providing in-depth sessions on quantum mechanics, quantum algorithms, quantum hardware, and their potential to revolutionize industries such as cryptography, material science, and artificial intelligence. Through expert-led lectures, hands-on training, and collaborative discussions, participants will gain valuable insights and skills that can be integrated into academic curricula and research endeavors, fostering a new generation of quantum-ready professionals.

Objective of The FDP

- To introduce the fundamental principles of quantum mechanics and their application in quantum computing, enabling participants to build a strong conceptual foundation.
- To familiarize faculty with key quantum algorithms such as Shor's and Grover's algorithms, and explore their significance in solving complex computational problems.
- To provide hands-on experience with quantum programming tools and platforms, such as Qiskit or IBM Quantum Experience, promoting practical skill development.
- To explore the current state and future directions of quantum hardware technologies, including quantum gates, qubits, and error correction techniques.
- To encourage interdisciplinary research and curriculum development by highlighting real-world applications of quantum computing across science, engineering, and industry.
- To foster collaboration and knowledge exchange among academicians, researchers, and industry experts in the field of quantum computing.

Who Should Attend

- Academician working in Colleges & university
- Ph.D Research scholars
- Post Graduate Students
- Professionals and industry experts

Convener

Dr.Sivaprakash.C
Prof & Head / AI&ML
Email:hod.aiml@sairamce.edu.in

Contact Details of Coordinators

Mr.P.Ramkumar
Assistant Professor/ AIML
Mob:8925169095
Email:ramkumarp.aiml@sairamce.edu.in

Mr.S.Vanarasan
Assistant Professor/ AIML
Mob: 8056649600
Email:vanarasans.aiml@sairamce.edu.in