

## ORGANIZING COMMITTEE

### CHIEF PATRON:

**Prof. Dr. (Mrs.) Mini Shaji Thomas**  
Director,  
National Institute of Technology  
Tiruchirappalli – 620015  
Tamilnadu, India

### INTERNATIONAL ADVISORY MEMBERS:

**Prof. Michael Sheng**  
Department of Computing  
Macquarie University  
Sydney, NSW 2109, Australia

**Dr. Rajan Shankaran**  
Senior Lecturer  
Department of Computing  
Macquarie University  
Sydney, NSW 2109, Australia

### COORDINATORS:

**Dr. Rajeswari Sridhar**  
Associate Professor,  
Department of Computer Science & Engg.  
National Institute of Technology  
Tiruchirappalli, India

**Dr. G.R. Gangadharan**  
Associate Professor  
Department of Computer Applications  
National Institute of Technology  
Tiruchirappalli, India

## ABOUT NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI, INDIA

The National Institute of Technology, Tiruchirappalli, started in 1964 with a view to catering to the needs of man-power in technology for the country. NITT is ranked first among all 31 NIT's for the third time and tenth among all the technical institutes in India by the National Institute Ranking Framework (NIRF). NITT is witnessing exponential growth in R&D activities. Apart from a large consultancy work undertaken by our departments, academic research gains its momentum day by day. NITT has signed several MOUs with industries and institutions in India and abroad to promote collaborative research and consultancies.

## ABOUT MACQUARIE UNIVERSITY, SYDNEY, AUSTRALIA

Macquarie University was established in 1964, began as a bold experiment in higher education and built to break from traditions: to be distinctive, progressive, and to be transformational. Macquarie University is consistently ranked in the top one per cent of universities in the world and within the top 10 in Australia. Macquarie University's research is leading the way in ground-breaking discoveries. Macquarie University's academics are at the forefront of innovation.

## ABOUT THE PROGRAMME

Cloud computing and Edge computing are the emerging topics in the Computer Science and Engineering stream to understand the data modelling and real-time processing of big data that render by various IoT devices (especially our focus on health care).



## CLOUD AND EDGE COMPUTING FOR BIG DATA ANALYTICS (with a focus on Healthcare)

16 December 2019 – 20 December 2019

**Coordinators**  
**Dr. Rajeswari Sridhar**  
**Dr. G. R. Gangadharan**

Organized by



NATIONAL INSTITUTE OF TECHNOLOGY  
TIRUCHIRAPPALLI, INDIA

In Association  
with



**MACQUARIE**  
**University**  
SYDNEY · AUSTRALIA

## ABOUT SPARC

Scheme for Promotion of Academic and Research Collaboration (SPARC) is an initiative from Ministry of Human Resource Development (MHRD), Government of India that is aimed at improving the research ecosystem in the higher education institutions in India. SPARC facilitates research collaborations with top institutions in 28 nations worldwide. SPARC aims at exposing large number of young students, the torch bearers of the future generation, to state of art developments in science, thereby increasing the number of highly trained scientific manpower in the country, as well as significantly enhance the visibility of Indian Science and Scientists in the world map of highly competitive cutting edge science. One component of the SPARC initiative is the conduct of joint workshop with the collaborating University.

## OBJECTIVES

To fulfill the objective of SPARC, this Workshop is intended to help young faculty and research scholars to understand and master cloud computing and edge computing techniques for Big data analytics. This workshop is part of the SPARC project

## SCOPE OF THE PROGRAM

The objective of this course is to cover state of the art research challenges, breakthrough technologies behind the storage and processing techniques of cloud computing, security and privacy by edge computing for IoT sensors, data modelling and real time processing by using various big data analytics techniques through AI/ML algorithms. The workshop aims to cover the recent research trends across the globe by involving lectures delivered by the international participating institution.

## TOPICS TO BE COVERED

- Trends and challenges of cloud computing and edge computing for big data
- IoT Challenges and Issues
- Cloud and Edge Computing for IoT
- Security, Privacy, and Trust in the Cloud and Edge
- Storage and Caching in the Edge/Fog and the Cloud
- Big Data Management in the Edge/Fog and Cloud
- Big data visualization
- Artificial Intelligence and Data Analytics in the Edge and the Cloud
- Machine learning and Deep learning techniques
- Electronic health records management and analysis
- Digital health care solutions and trends
- Case studies in health care analytics

## RESOURCE PERSONS

The course faculty includes resource persons from Macquarie university, Australia, IITs, NITs, and other reputed institutions and industries.

## PARTICIPANTS

Faculty members and Research Scholars from Computer Science and Engineering, Information Technology departments of all universities/ institutes/ colleges. Limited number of candidates only will be selected.

## ACCOMMODATION

Accommodation will be arranged on request basis at a nominal fee in the institute Guest house/ Hostel. **Refreshment and lunch will be arranged for the candidates during the period of the program for free of cost.**

## REGISTRATION

**Interested Candidates are requested to fill and submit the following form:**

<https://docs.google.com/forms/d/17dbGXfIMMplbn285m7J4airJcKdDh2QwrSgbBDkPeEM/edit>

## REGISTRATION FEES

For Academicians	<b>Rs. 1000/-</b>
For Industry personnel	<b>Rs. 2000/-</b>

DD needs to be drawn in favor of "The Director, NIT, Tiruchirappalli – 620015" payable at NIT Tiruchirappalli. The DD along with the signed hard copy of the submitted Google form need to be sent to :

**The Coordinators, SPARC workshop, Department of Computer Science and Engineering, National Institute of Technology, Tiruchirappalli - 620015**

## IMPORTANT DATES

Last date for receiving the duly filled in Registration forms (Hard Copy)	<b>30 November 2019</b>
Confirmation of Participants will be intimated through email by	<b>2<sup>nd</sup> December 2019</b>

**For any clarifications, please contact:**

Mrs. S. Lavanya, Mobile : 8985618313  
Mr. D. Selvam, Mobile: 9790686936