#### **About TCE**

Thiagarajar College of Engineering (TCE), Madurai, an autonomous institution, affiliated to Anna University, Chennai, is one among the several Educational and philanthropic Institutions founded by Late. Shri Karumuttu Thiagarajan Chettiar, established in 1957. TCE offers 9 undergraduate (UG), 10 postgraduate (PG) and Doctoral programmes in Engineering and Science. The programmes have been accredited by National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC) with the Grade A+ (3.47 out of 4). The College has a Technology Business Incubator unit supported by the Govt. of India and it has incubated a company Thiagarajar Telekom Solutions Limited in the area of RF Systems and Antennas. At TCE, Conceive-Design-Implement-Operate (CDIO) framework is adopted to provide a systematic approach in realizing stakeholder expectations to raise the educational standard to global needs. TCE has secured rank 71 in the National Institutional Ranking Framework (NIRF-2021) of MHRD, Government of India.

## Register Online at

https://forms.gle/QuacmRQENF24iEHY8

# Further details contact Dr.G.Ananthi,AP,TCE,Madurai

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## **Details of Registration:**

Registration Fee: Rs.1180/- (Rs.1000 +18% GST) (Rupees One Thousand hundred and Eighty only)

Payment Link:

https://eazypay.icicibank.com/

Type "T C E" and select ("T C E SOUVENIOR") from the Drop down Menu.

#### **ECE Department**

Department of Electronics and Communication Engineering offers a UG programme in Electronics and Communication Engineering and a PG programme In Communication Systems. Both UG and PG programmes are accredited by National Board of Accreditation (NBA). The department has been awarded for Best Industry-Linked Electronics and Engineering Institute by AICTE-CII in 2014. This DST FIST supported department has completed sponsored research projects from research organizations like RCI, DRDL, LRDE, DEAL, DLRL, BrahMos Aerospace, ISRO and consultancy works in the field of Wireless Communications and Signal Processing. The department has established industry sponsored laboratories with National Instruments, Agilent Technologies, CISCO, Altera, Freescale, Intel, Cypress and Texas Instruments.

#### **Workshop Outline**

Adaptive Signal Processing: MSE, Gradient Descent Algorithm, LMS, RLS and Kalman Filters Statistical signal processing algorithms for Machine learning: Newtons Method and Gradient Descent Algorithms, Regularization, Classification of Signals in Additive Gaussian Noise, Bayesian Classification Pattern Recognition and Machine Learning: Linear Discriminant, Least Squares Classification, Support Vectors Principle Deep Learning: Multilayer Perceptrons (MLPs), Representation MLPs, Power Sigmoid Neurons, Feedforward Neural Networks, Backpropagation, Autoencoders, CNN, RNN Applications: EMG data acquisition and processing, Classification of Gestures using EMG signals using deep learning algorithm, EEG signal processing for Yoga Mudras, Retinal Image Analysis using Deep learning, Speech **Processing Algorithms** 



Online Workshop on

Signal Processing for Machine Learning:

Medical and Speech Perspective (January 6- 8, 2022)

Organized by

Department of
Electronics & Communication
Engineering



Thiagarajar College of Engineering Madurai - 625 015

**Course Coordinators** 

Dr.S.J.Thiruvengadam
Dr.K.Rajeswari
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