

## **ONE DAY WORKSHOP**

ON

MACHINE LEARNING APPROACH FOR **MODELING, SIMULATION AND CONTROL OF UNSTABLE SYSTEM** 

Organized by **DEPARTMENT OF ELECTRONICS & INSTRUMENTATION** ENGINEERING **B S ABDUR RAHMAN CRESCENT INSTITUTE OF SCIENCE AND TECHNOLOGY** VANDALUR, CHENNAI-48

# **ABOUT THE INSTITUTION**

**B.S. Abdur Rahman Crescent Institute of Science** and Technology is a renowned Quality Leadership Institution located at the greenest spot of Chennai near Tambaram, since 1984. The Institution offers 56 programmes, grouped under 12 different Schools, 31 Undergraduate programmes, 25 Postgraduate programmes, and Ph.D. (in all the departments). The institute is accredited with "A+" Grade by NAAC. The quality system of the institute is ISO 9001:2015 certified by DNV-GL. The institution is a rising stalwart in higher education with promising **Quality, Security and Placement.** 

DATE: 15.11.23

**VENUE:** Process Automation Lab, EIE Department

QUANSER

REGISTRATION FEE : Rs.200/- per participant

**NHO CAN** TTEND:

Research scholars, Final year UG and PG students of EIE, ICE and any engineering discipline (working in data modeling and control)

### **ABOUT THE DEPARTMENT**

The Department of **Electronics** and Instrumentation Engineering was started in the year 1995. The Department offers Under Graduate program in B.Tech - Electronics and Instrumentation Engineering. The department has well qualified and experienced faculties in all specializations such as Process Control, Instrumentation, Signal and Image Processing. The department was accredited by NBA in 2002, 2006, 2016 and reaccredited in 2019. The department has signed MoU with MTL Eaton, US and ENVEA India Pvt Ltd. The department has an established Calibration Centre with NABL Certified Equipment and well bequipped laboratories.

# **ABOUT THE WORKSHOP**

Unstable systems are difficult to analyze and control because they exhibit unpredictable behavior and may be sensitive to small changes in their input or operating conditions. So, stability is an important consideration in the design of unstable systems in various fields. Common example for an unstable system is an inverted pendulum. Inverted pendulum finds application in robotics, aerospace, Segway etc. In the current scenario, machine learning is employed for plant modeling and control for complex systems, unstable systems and nonlinear systems to improve the efficiency and accuracy of the process bv optimizing parameters and minimizing errors. This workshop aims to provide knowledge on the application of Machine learning in process modeling and control for a rotary inverted pendulum.

# **RESOURCE PERSONS**

- Dr.S.Lakshmana Prabu, Asst. Manager, Renault Nissan Technology & Business Centre India
- Dr.G.Anitha, AP(Sel.Gr)/EIE BSACIST
- Dr.J.Susai Mary, AP/EIE BSACIST
- Dr.P.R.Hemavathy, AP(Sel.Gr)/EIE BSACIST

#### CONVENORS

Dr. C.Tharini, Dean (SECS)

Dr.D.Najumnissa Jamal, Prof. & HOD/EIE

## **CO-ORDINATORS**

Dr.P.R.Hemavathy, Asst.Prof(Sel.Gr)/EIE Email : shemavathy@crescent.education Mobile : 9841232253

Dr. J.Susai Mary, Asst.Prof/EIE Email : susaimary.eie@crescent.education Mobile : 9444554169

#### **PAYMENT DETAILS**

Account Name : Society of Instrumentation and Control Engineers Account Number : 165701000003032 IFSC code & Branch : IOBA0001657, Vandalur

#### FOR REGISTRATION

https://forms.gle/6nr1XBtXHn22ZW3c8

