# **G PULLA REDDY ENGINERING COLLEGE (AUTONOMOUS)** KURNOOL, ANDHRA PRADESH - 518007







EEE Advancing Technology for Humanity

### **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING ORGANIZES ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM** ON **IOT AND MACHINE LEARNING RESOURCE PERSONS**



Dr. DVLN SOMAYAJULU DIRECTOR IIIT - DM, KURNOOL

Dr. K V Eswaramoorthy **ASSISTANT PROFESSOR, ECE IIIT - DM, KURNOOL** 

### **NO REGISTRATION FEE**

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SRI P V S MARUTI RAO FOUNDER & DIRECTOR OF VIDCENTUM R&D, HYDERABAD



Dr. ATUL NECI **PROFESSOR AT SCHOOL OF CIS UNIVERSITY OF HYDERABAD** 













### **11 26<sup>th</sup> JUNE - 30<sup>th</sup> JUNE 2020** 🛈 10:30 AM - 12:30 PM

### **ABOUT COLLEGE**



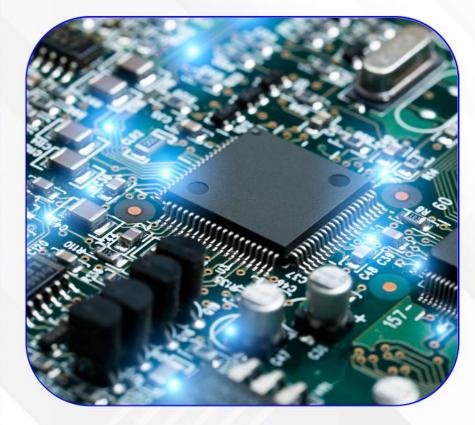
**G** PULLA REDDY ENGINEERING COLLEGE IS THE BRAINCHILD OF LATE SRI G.PULLA REDDY, THE RENOWNED PHILANTHROPIST AND A GREAT HUMANIST. ESTABLISHED IN 1984-85, IT IS ONE OF THE EARLIEST PRIVATE ENGINEERING COLLEGES IN ANDHRA PRADESH STATE. **GPREC** HAS BEEN FUNCTIONING AS AN AUTONOMOUS INSTITUTION SINCE 2006. THE COLLEGE IS BEING MANAGED BY G PULLA **Reddy Charites trust, Hyderabad. The TRUST WAS INSTITUTED BY** LATE SRI. G PULLA REDDY GARU IN 1975 WITH THE MOTTO OF RENDERING SERVICE TO THE SOCIETY.

### **ABOUT DEPARTMENT**



THE ECE DEPARTMENT WAS ESTABLISHED IN THE ACADEMIC YEAR 1984-85 WITH AN INTAKE OF 40 AND CURRENTLY WITH 180 REGULAR AND 36 LATERAL ENTRY STUDENTS. THE DEPARTMENT IS ALSO OFFERING A POST GRADUATE PROGRAMME WITH THE SPECIALIZATION OF VLSI EMBEDDED SYSTEMS WITH AN INTAKE OF 18 STUDENTS. THE DEPARTMENT HAS HIGHLY QUALIFIED FACULTY HAVING SPECIALIZED IN DIVERSIFIED AREAS OF TECHNOLOGY LIKE COMMUNICATIONS, SIGNAL **PROCESSING, MICROELECTRONICS, MICROPROCESSORS, INSTRUMENTATION AND** CONTROL AND DIGITAL ELECTRONICS. THE DEPARTMENT IS WELL EQUIPPED AND HAS

**EXCELLENT LABORATORY FACILITIES.** 



INTERNET OF THINGS IN SHORT IOT IS A TRENDING **TECHNOLOGICAL FIELD THAT CONVERTS ANY** ELECTRONIC DEVICE INTO A SMARTER ONE. **A** LOT OF INDUSTRIES ARE BEGINNING TO ADOPT THIS TECHNOLOGY ON TO THEIR OPERATIONS TO **INCREASE THEIR PRODUCTIVITY AND IMPROVE** EFFICIENCY. THIS TECHNOLOGY CAN BE INTEGRATED INTO ALMOST ALL THE INDUSTRIES, WITH THE HELP OF MACHINE LEARNING WE CAN HAVE ACCURATE PREDICTING FUTURE EVENTS, SO THERE IS A NEED FOR INTEGRATION OF THESE TWO CUTTING EDGE TECHNOLOGIES. THIS PROGRAMME IS ONE OF THE STEPPING STONE TOWARDS THAT MOTIVE.

## **ABOUT PROGRAM**

### **OBJECTIVES OF FDP**

- --> TO CREATE AN AWARENESS ON THE IMPORTANCE OF DATA ANALYTICS IN IOT.
- --> ABLE TO DIFFERENTIATE DIFFERENT TYPES OF SENSORS AND ABLE TO INTERFACE THEM.
- --> DESIGN AND IMPLEMENTATION OF INDUSTRIAL IOT GATEWAY WITH IEEE 1451 STANDARDS
- --> TO UNDERSTAND THE IMPORTANCE OF MACHINE LEARNING AND ABLE TO APPLY THE SUPERVISED LEARNING MODEL FOR REAL TIME APPLICATIONS.
- --> IMPLEMENTATION OF RECOMMENDER SYSTEMS USING MACHINE LEARNING.

### **EXPECTED OUTCOMES OF FDP**

AT THE END OF THIS PROGRAM, THE PARTICIPANTS WILL BE ABLE TO:

- --> UNDERSTAND THE IMPORTANCE OF DATA ANALYTICS IN IOT.
- --> UNDERSTAND THE FUNCTIONING AND INTERFACING OF DIFFERENT SENSORS.
- --> IMPLEMENT THE APPLICATIONS OF IOT GATEWAY WITH IEEE 1451 STANDARDS.
- --> APPLY DIFFERENT SUPERVISED LEARNING ALGORITHMS FOR REAL TIME APPLICATIONS.
- --> ANALYZE THE FUNTIONALITY OF RECOMMENDER SYSTEMS.

### **FDP GUIDELINES**

- --> THE SESSION WILL BE FROM 10:30 AM TO 12:30 PM DAILY.
- --> THE LINK FOR THE SESSIONS WILL BE PROVIDED IN THE WHATSAPP GROUPS ON THE DAY OF SESSION.
- --> PARTICIPANTS ARE INFORMED TO FILL THE FEEDBACK LINK THAT IS PROVIDED AT THE END OF THE SESION.
- --> THE E-CERTIFICATE WILL BE PROVIDED TO ALL THE PARTICIPANTS WHO ATTENDS ALL THE SESSIONS AND ON PROVIDING FEEDBACK.

# **DAY-WISE SCHEDULE**

**DAY - 1: SPEAKER: Dr. D L V N SOMAYAJULU, DIRECTOR, IIIT - DM, KURNOOL.** TOPIC: ROLE OF DATA ANALYTICS IN IOT **DAY - 2:** SPEAKER: Dr. K V ESWARAMOORTHY, ASSISTANT PROFESSOR, ECE, IIIT - DM, KURNOOL. IOT SENSOR INTERFACING & SELECTION OF POWER SOURCE TOPIC: **DAY - 3:** SPEAKER: SRI P V S MARUTHI RAO, FOUNDER & DIRECTOR OF VIDCENTUM R&D, HYDERABAD TOPIC: **DESIGN & IMPLEMENTATION OF INDUSTRIAL IOT GATEWAY WITH IEEE 1451 STANDARDS DAY - 4:** SPEAKER: Dr. ATUL NEGI, PROFESSOR AT SCHOOL OF COMPUTER & INFORMATION SCIENCES, UNIVERSITY OF HYDERABAD TOPIC: INTROUDCTION TO MACHINE LEARNING & SUPERVISED LEARNING **DAY - 5:** SPEAKER: Dr. SANJAYA KUMAR PANDA, ASSISTANT PROFESSOR, CSE, NIT WARANGAL TOPIC: CASE STUDY OF MACHINE LEARNING : RECOMMENDER SYSTEMS (RS'S) - ARCHITECTURE, TYPES & IMPLEMENTATION OF RS'S

**CHAIRMAN** 

SRI P SUBBA REDDY, CHAIRMAN

**CHIEF PATRON** 

Dr. B Sreenivasa Reddy, Principal

## PATRON

Dr. S NAGARAJA RAO, PROFESSOR & HEAD OF E Dr. K Suresh Reddy, Professor & Dean of E

## CONVENOR

Dr. D R SRINIVAS, ASSOCIATE PROFESSOR OF E

# **CO-CONVENORS**

Dr. S M Shamsheer Daula, Associate Professor o Sri G Ramesh, Assistant Professor of ECE Ms. W Yasmeen, Assistant Professor of ECE Smt. M Chaitanya, Assistant Professor of ECE Sri T Naresh, Assistant Professor of ECE Sri G Pavan Kumar, Assistant Professor of ECE

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