

A Seminar On

"Introduction to ARM Based System-on-Chip Design"



### **Introduction:**

The Internet of Things promises billions of devices endowed with processing, memory and communication capabilities. These processing nodes will be, in effect, simple Systems on Chips (SoCs) and will need to be inexpensive and able to operate under stringent performance, power and area constraints. This seminar focuses on building SoCs around Arm Cortex-M0 processors, perfectly suited for IoT needs. Using FPGAs as prototyping platforms, this course explores a typical SoC development process: from creating high level functional specifications to design, implementation and testing on real FPGA hardware using standard hardware description and software programming languages..

## **Objectives:**

To develop Arm Cortex-M0 based SoCs, from creating high-level functional specifications to design, implementation and testing on FPGA platforms using standard hardware description and software programming languages

Speaker's Details	: Mr.T.Muralikrishnan, K.Ramakrishna College of Technology, Trichy
Date	: 22.02.2021
Target Audience	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



## A Seminar

On

# "Recent Trends in Embedded Systems (RTES)"



#### **Introduction:**

Embedded system is evolving considerably into a top industry to be noted in this technical world. The board, diver and highly fragmented embedded system get more attention among job seekers and software engineers for career development. The industry sectors also seeking more evolved technical approach in Embedded systems and their innovations to offer various strategies. More industries and products and their services now rely on embedded systems which makes them highly innovative in solutions offering to customers

### **Objectives:**

Technology trends are reaching some heights. In embedded also, the Devices has grown into unique properties which fit in all categories and sectors. Considering the different business sectors and their application in future, Embedded System and Device gets more attraction in future due to its application-oriented results and focussing areas of development. This seminar generally addresses several key points:

- Automation everywhere
- System-on-Chip solution
- ➢ IoT security, Healthcare, Automobile

Speaker's Details : Dr.K.Prathyusha, Associate Professor, ECE, NRI Institute of Technology,

Vijayawada

Date	: 29.03.2021
Target Audience	: Students & Faculty of SITAMS.
Organised by	: Department of ECE, SITAMS.



A Seminar On "Global Navigation Satellite System"



### **Introduction:**

A global navigation satellite system (GNSS) is a network of satellites broadcasting timing and orbital information used for navigation and positioning measurements. Our Introduction to GNSS webinar series goes into more detail about how GNSS works, but a simplified version is that satellites transmit signals that report where they are at what time, with that information being used to determine where you are in the world. Through a complex series of trilateration calculations, your technology computes your location based on your position in relation to at least four satellites. GNSS are more than the satellites orbiting Earth. The multiple groups of satellites, known as constellations, broadcast signals to master control stations and users of GNSS across the planet. These three segments – space, control and user – are all considered part of GNSS. But most frequently, GNSS is used to describe the satellites in space.

## **Objectives:**

In this seminar, GNSS history and how they are used today are explained. We also compare the different GNSS constellations and their features, as well as the equipment necessary to access GNSS signals.

Speaker's Details	: Dr.V.Jayaprakasan, Professor, Srinidhi Institute of Technology
Date	: 14.09.2020
Target Audience	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



A Seminar On

"Artificial Neural Networks: Health care Applications"



## **Introduction:**

Computer technology has been advanced tremendously and the interest has been increased for the potential use of 'Artificial Intelligence (AI)' in medicine and biological research. One of the most interesting and extensively studied branches of AI is the 'Artificial Neural Networks (ANNs)'. Basically, ANNs are the mathematical algorithms, generated by computers. ANNs learn from standard data and capture the knowledge contained in the data. Trained ANNs approach the functionality of small biological neural cluster in a very fundamental manner. They are the digitized model of biological brain and can detect complex nonlinear relationships between dependent as well as independent variables in a data where human brain may fail to detect. Nowadays, ANNs are widely used for medical applications in various disciplines of medicine especially in cardiology

## **Objectives:**

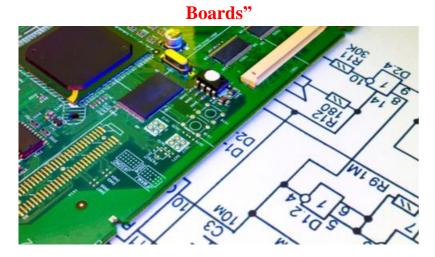
ANNs have been extensively applied in diagnosis, electronic signal analysis, medical image analysis and radiology. ANNs have been used by many authors for modeling in medicine and clinical research. Applications of ANNs are increasing in pharmaco-epidemiology and medical data mining.

Speaker's Details	: Dr.S.Priyanka, Assistant Professor, Department of ECE, SITAMS
Date	: 10.08.2020
<b>Target Audience</b>	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



A Seminar On

# "Printed Circuit Board: An Introduction and the Basics of Printed Circuit



### **Introduction:**

A printed circuit board is a rigid structure that contains electrical circuitry made up of embedded metal wires called traces, and larger areas of metal called planes. Electronic components are soldered to the top, bottom, or both layers of the board onto metal pads. These pads are connected to the board circuitry allowing the components to be interconnected together. The board may be composed of either a single layer of circuitry, circuitry on the top and bottom, or of multiple layers of circuitry stacked together.

## **Objectives:**

Printed circuit boards are used for a variety of purposes. You can find simple circuit boards in toys or controllers, while advanced circuit boards are used in computers and telecommunications. Some boards are made with flexible materials thereby allowing them to be used in unique cases and enclosures that require them to bend around other features of the device. Some boards are built with specialized materials due to the high frequencies that they operate at, while other boards have heavy layers of copper in them for high powered circuits used in industrial control panels and other similar applications.

Speaker's Details	: Dr.M.Saravanan, Dean, SITAMS, Chittoor
Date	: 22.01.2021
Target Audience	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



# A Seminar

On

# "The Raspberry Pi Platform and Python Programming for the Raspberry Pi"



### **Introduction:**

The Raspberry Pi is a small, affordable single-board computer that you will use to design and develop fun and practical IoT devices while learning programming and computer hardware. In addition, you will learn how to set up up the Raspberry Pi environment, get a Linux operating system running, and write and execute some basic Python code on the Raspberry Pi. You will also learn how to use Python-based IDE (integrated development environments) for the Raspberry Pi and how to trace and debug Python code on the device.

### **Objectives:**

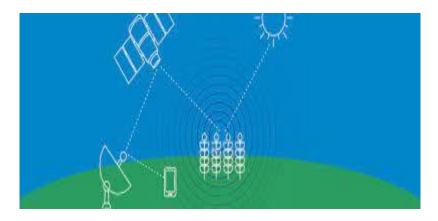
This seminar generally addresses several key points:

- Computer Programming
- Python Programming
- Internet Of Things (IOT)
- Raspberry Pi

Speaker's Details	: Dr. K.Gopi, Associate Professor, Department of ECE, SITAMS
Date	: 02.12.2020
Target Audience	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



# A Seminar On "Remote Sensing and Its Applications"



### **Introduction:**

Remote that means something which is not exactly in contact or physical contact, Sensing means getting information, data something like temperature, pressure, photograph, etc. Remote sensing is the process of acquiring information, detecting, analyzing, monitoring the physical characteristics of an area by recording it is reflected and emitted radiation energy without having any physical contact with the object under study. This is done by capturing the reflected radiation/energy.

## **Objectives:**

Satellites play a huge role in the development of many technologies like world mapping, GPS, City planning, etc. Remote Sensing is one of the many innovations that were possible, thanks to the satellites roaming around the earth. The objective of this seminar is to know the application of remote sensing in

- Weather
- Forestry
- Agriculture
- Surface changes
- Biodiversity

Speaker's Details	: Mrs.K.Karthika, Assistant Professor, Department of ECE, KCT
Date	: 12.11.2020
Target Audience	: Students of ECE, SITAMS.
Organised by	: Department of ECE, SITAMS.



A Seminar On

# "Recent Trends and Developments in Telecommunications Network"



### **Introduction:**

Many telecoms companies are increasingly looking for hybrid engineers, so adding a complementary skill to your portfolios such as Cisco or Juniper certification is a good idea. Also, scripting and learning about open-source software will make you more attractive to employers in the 5G jobs market. The added benefit is that many of these new 5G technology skills will be transferable to other industry sectors

Telecom plays the largest role of any industry in supporting the shift to a hybrid work model. Providers saw an extraordinary boost in network traffic as households and businesses around the world went under lockdown because of the COVID-19 pandemic. Households worldwide relied on telco services to support everything from remote working and virtual school to live stream entertainment and more.

### **Objectives:**

This seminar focuses on 4 key trends that will open up growth opportunities for the telecom sector and help businesses move toward a sustainable future. They are

- Speed
- Connectivity & Automation, Cyber Security and Compliance

**Speaker's Details** : Mr.K.Malika Arjun Reddy, Associate Professor, Vemu Institute of Technology, Chittoor

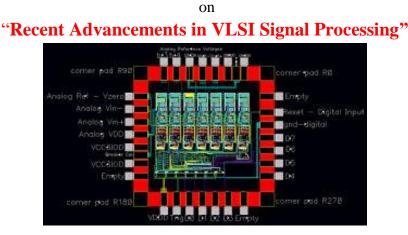
Date	: 21.10.2020
Target Audience	: Students of SITAMS.
Organised by	: Department of ECE, SITAMS.



# SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES (AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to JNTU Anantapur) Dr.D.K.Audikesavulu Marg, Murukambattu Post, Chittoor – 517127

# A Technical Seminar



### **Introduction:**

This Technical Seminar will immensely help the faculty members, researchers and Students to broad base their knowledge on VLSI Design, Synthesis, and implementation which would enable them to pursue an effective research career. This seminar focus on latest research in different domains of electronics and communication engineering, in particular microelectronics and VLSI design, communication systems and networks, and signal and image processing.

## **Objectives:**

The seminar also discusses the emerging applications of novel tools and techniques in image, video and multimedia signal processing.

- CAM and DCAM Architecture implementation in FPGA.
- High level synthesis for FPGA.
- VLSI Design of Advanced Digital filters.
- Modular architectures for resilience against power analysis attack.
- Partial Reconfiguration on FPGAs.
- Trend and challenges on SOC design., Wave pipelining.
- VLSI Implementation of Cryptographic Algorithms for Security and Privacy in Communication Networks

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Speaker's Details	: Mr.S.Nagaraj, Associate Professor, ECE, SVCET, Chittoor
Date	: 09.07.2020
Target Audience	:. Faculty & Students of ECE, SITAMS
Organised by	:. Department of ECE, SITAMS