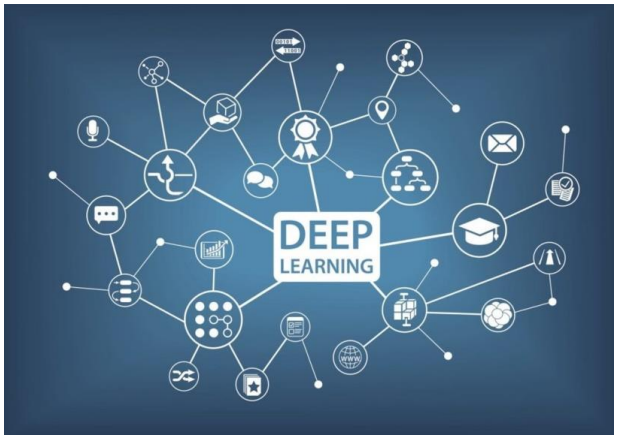
SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)
(Approved by AICTE, New Delhi & Affiliated to JNTU Anantapur) Dr.D.K.Audikesavulu Marg, Murukambattu Post, Chittoor – 517127

A webinar
On

"Deep Learning-A Review"



Introduction: Artificial intelligence (AI) as intelligence exhibited by machines has been an effective approach to human learning and reasoning. AI is divided in more specific research subfields. Machine translation algorithms have resulted in various applications that consider grammar structure as well as spelling mistakes. Moreover, a set of words and vocabulary related to the main topic is automatically used as the main source when the computer is suggesting changes to writer or editor.

Objectives:

- It comprises multiple hidden layers of artificial neural networks.
- The deep learning methodology applies nonlinear transformations and model abstractions of high level in large databases.
- The recent advancements in deep learning architectures within numerous fields have already provided significant contributions in artificial intelligence.

Speaker's Details : Mr.Sannasi Chakravarthy, Assistant Professor, Department of ECE, Bannari Amman Institute of Technology

Date : 10.02.2021

Target Audience : II & III Year of ECE

Organised by : Department of ECE

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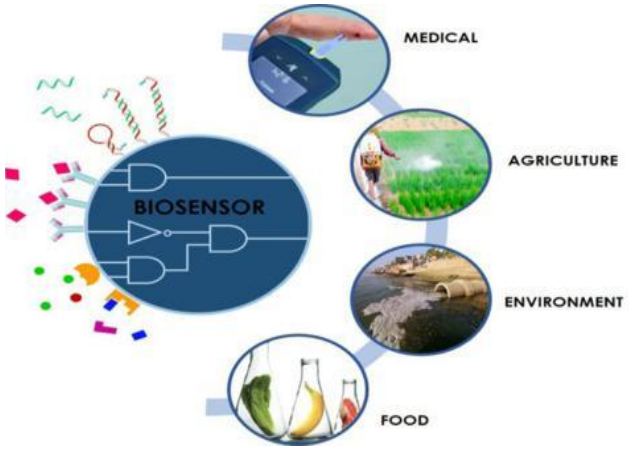
A webinar
On

"Biosensors and its Applications"



Introduction: Biosensors are the device in which there is a coupling of biological sensing element whit a detector system using a transducer. In comparison with any other currently available diagnostic device, biosensors are much higher in performance in terms of sensitivity and selectivity both. Biosensors have found potential application in the industrial processing and monitoring, environment pollution control, also in agriculture and food industries. Important features for commercialization of the biosensors are selectivity, sensitivity, stability, reproducibility and low cost.

Objectives:

- Fast analytical methods are highly needed in food industry for determination of specific chemical compounds in food products.
- Dicussion about various applications of biosensors which helped in medical,food industry.
- One can know how to collect data from biosensors and how to trace and monitored during production, distribution and consumption of fresh products to ensure their safety.

Speaker's Details : Dr.N.Nanda kumar, Founder, Pri-Biomedical, Coimbatore.
Date : 18.11.2020
Target Audience : II Year of ECE.
Organised by : Department of ECE.

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A webinar
On

"Program on Career Opportunities after B.Tech"

Introduction: After completing the B.Tech course, candidates can either pursue higher studies or consider pursuing a **job after B.Tech** in the field of their choice. Although M.Tech is a natural course choice after completing a B.Tech course, these days many students opt to take up an MBA course after completing their B. Tech degree program.Other options that aspirants can consider include picking up a job at a PSU (Public Sector Undertaking), taking the Civil Services entrance exam, or joining a private company.

Objectives:

- Expanding knowledge and skills
- Increasing earning potential
- Giving a competitive advantage
- Boosting professional credibility
- Enhancing the pay scale

Speaker's Details : Mr.Venkata Kamesh, ACE Technologies, Tirupati.

Date : 10.06.2021

Target Audience : III & IV Year of ECE.

Organised by : Department of ECE, SITAMS.

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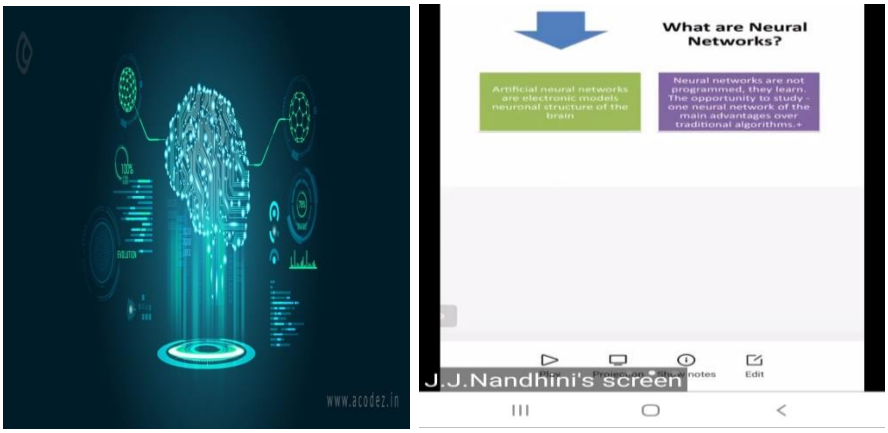
A webinar
On

"Artificial Neural Networks"



Introduction: An artificial neural network (ANN) is an imitation of the human brain. A natural brain has the ability to learn new things, adapt to new and changing environment. The brain has the most amazing capability to analyze incomplete and unclear, fuzzy information, and make its own judgment out of it. For example, we can read other's handwriting though the way they write may be completely different from the way we write. A child can identify that the shape of a ball and orange are both a circle. Even a few days old baby has the ability to recognize its mother from the touch, voice and smell. An artificial thinking machine is still beyond the capacity of the most advanced supercomputers

Objectives:

- Understand the concept and definitions of artificial neural networks (ANN)
- Know the similarities and differences between biological and artificial neural networks
- Learn the different types of neural network architectures
- Learn the advantages and limitations of ANN
- Understand how backpropagation learning works in feedforward neural networks

Speaker's Details : Mrs.J.J.Nandhini, Assistant Professor, CSE, Sri Ramachandra Engineering and Technology, Chennai.

Date : 11.12.2020

Target Audience : II & III Year of ECE.

Organised by : Department of ECE.

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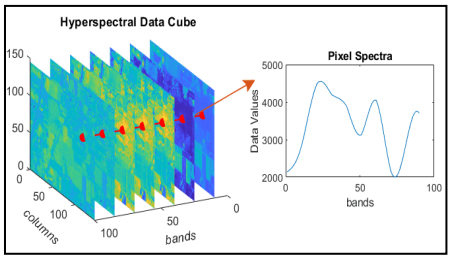
A Webinar
On

"Road ahead Computational Intelligence Research for Hyperspectral Image Classification"



Introduction: Hyperspectral image processing extracts, stores and manipulates both spatial and spectral information contained in hyperspectral images across the visible and near-infrared portion of the electromagnetic spectrum. The demand for new hyperspectral image processing tools and techniques more appropriate for near sensing in laboratories or fields of various science and engineering communities has been increasing in recent years. In addition to the hyperspectral image processing algorithms developed for remote sensing applications, chemometrics and multivariate statistical data analysis techniques and their preprocessing techniques have been applied to process hyperspectral images. A typical hyperspectral image processing workflow for near-sensing applications includes normalization, correction, dimensionality reduction, spectral library building, and data processing.

Objectives: Hyperspectral imaging measures the spatial and spectral characteristics of an object by imaging it at different wavelengths. The wavelength range extends beyond the visible spectrum and covers from ultraviolet to long wave infrared wavelengths. The most popular are the visible, near-infrared, and mid-infrared wavelength bands. In this webinar, recent advances in hyperspectral image processing algorithms and workflows for hyperspectral image processing are discussed.

The main topics are image acquisition, calibration, spectral and spatial preprocessing, scatter correction, binning, and feature extraction and selection. The processing involves representing, analyzing, and interpreting information contained in the hyperspectral images.

Speaker's Details : Dr. K.Kavitha, Professor, Velammal College of Engineering and Technology, Madurai.

Convenor : Dr. C. Kavitha, Associate Professor, ECE Dept., SITAMS.

Date : 24.08.2020

Target Audience : Faculty and Student members.

Organised by : R & D Cell in association with ECE Department, SITAMS.

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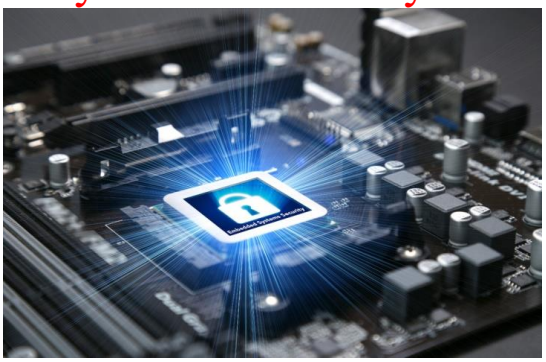
A Webinar
On

"Security in Embedded Systems"



Introduction:

Embedded system is becoming a main solution to most specific tasks because of its high stability, economic power consumption, portability and numerous useful. As a result, embedded system was used as a tiny computer to process many applications. Nowadays, many new applications are developed using web- based technologies, which users can access from anywhere through the Internet. However, data communicated between users and web-based applications may be revealed by anyone in the Internet, so secured communication is needed for web-based applications.

Objectives:

- Various types of existing attacks against hardware devices and embedded systems
- It analyzes existing design methodologies for their vulnerability to new types of attacks, and along the way describes solutions and countermeasures against them for the design and development of secure systems.
- The hardware attacks can be mounted at any of the layers of abstraction involved in the fabrication of the device with varying degrees of success.

Speaker's Details :Mr.T.Muralikrishnan, Assistant Professor, Department of ECE,K.Ramakrishna College of Technology, Trichy.

Date : 06.01.2021

Target Audience :II & III Year of ECE.

Organised by : Department of ECE, SITAMS.

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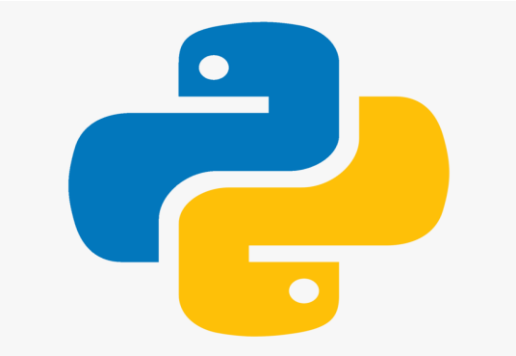
A webinar

On

"Python Programming for Beginners"



Introduction: Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

Objectives:

- Master the fundamentals of writing Python scripts.
- Learn core Python scripting elements such as variables and flow control structures.
- Discover how to work with lists and sequence data.
- Write Python functions to facilitate code reuse.
- Use Python to read and write files.

Speaker's Details : Mr.S.Surya Kumar, Software Engineer, AppviewX Pvt Ltd.

Date : 16.03.2021

Target Audience : III Year of ECE.

Organised by : Department of ECE, SITAMS.

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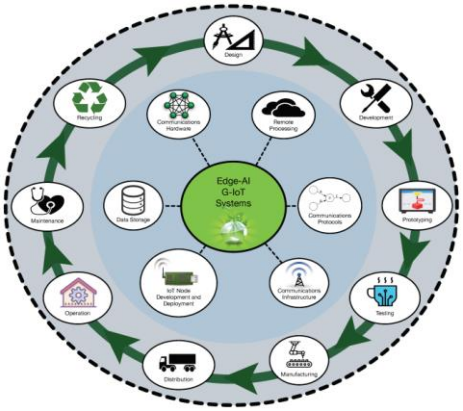
A webinar
On

"Making Green Energy for Tomorrow's IOT Devices"



Introduction: Energy harvesting is the process of taking energy from one or more environmental accumulating them and converting them into usable electrical energy. This harvested electrical energy powers the IoT devices and increase the lifetime of the IoT system.. In Harvest and Use architecture, the harvested energy directly powers the system. If harvested energy is not enough, the system will remain in idle state. In Harvest-Store-Use architecture, the harvested energy directly powers the system and is also stored for future use. When availability of harvested energy is larger than the present need of the system, then remaining energy is stored for later use.

Objectives:

- Why energy harvesting is required and different architectures of harvesting systems.
- Harvesting energy from the environmental sources and other energy sources is considered as a promising solution for increasing the lifetime and efficiency of the IoT systems.
- Green networks in IoT will contribute to reducing emissions and pollutions, exploiting environmental conservation and surveillance, and minimizing operational costs and power consumption.

Speaker's Details **:**, Mr.K.Ramachandra Reddy, Assistant Professor, Department of ECE,St.Joseph College of Engineering, Chennai.

Date **:** 07.10.2020

Target Audience **:** III Year of ECE.

Organised by **:** Department of ECE, SITAMS.

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A webinar
On

"Research Scope in Satellite image processing"

Introduction: Historical maps classification has become an important application in today's scenario of everchanging land boundaries. Historical map changes include the change in boundaries of cities/states, vegetation regions, water bodies and so forth. Change detection in these regions is mainly carried out via satellite images. Hence, an extensive knowledge on satellite image processing is necessary for historical map classification applications.

Objectives:

- Though several computational methods are available, different methods perform differently for the various satellite image processing applications.
- Wrong selection of methods will lead to inferior results for a specific application.
- This highlights the methods and the suitable satellite imaging methods associated with these applications.
- This will help support the selection of innovative solutions for the different problems associated with satellite image processing applications.

Speaker's Details : Dr.K.Kavitha, Professor, Department of ECE, Velammal College of Engineering and Technology, Madurai

Date : 22.04.2021

Target Audience : II Year students of ECE.

Organised by : Department of ECE, SITAMS.