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NEWSLETTER

DEPARTMENT OF ELECTRONIC ENGINEERING

Webinar on Python Programming

Python is a high-level, general-purpose and a very popular programming language. Python programming language (latest Python 3) is being used in web development, Machine Learning applications, along with all cutting edge technology in Software Industry. Python Programming Language is very well suited for Beginners, also for experienced programmers with other programming languages like C++ and Java. Below are some facts about Python Programming Language: Python is currently the most widely used multi-purpose, high-level programming language. Python allows programming in Object-Oriented and Procedural paradigms. Python programs generally are smaller than other programming languages like Java. Programmers have to type relatively less and indentation requirement of the language, makes them readable all the time. Python language is being used by almost all tech-giant companies like — Google, Amazon, Facebook, Instagram, Dropbox, Uber... etc. The biggest strength of Python is huge collection of standard library which can be used for the following:

- Machine Learning
- GUI Applications (like Kivy, Tkinter, PyQt etc.)
- Web frameworks like Django (used by YouTube, Instagram, Dropbox)
- Image processing (like OpenCV, Pillow)
- Web scraping (like Scrapy, BeautifulSoup, Selenium)
- Test frameworks
- Multimedia
- Scientific computing
- Text processing and many more..



Event Outcome

Understanding of essential concepts of Python programming

Chief Guest/Resource Persons

Er. Gurmeet Sharma,
Eureka Electrosoft sol. Pvt. Ltd

Webinar on IOT based instruments

IoT starts at the sensor level where pressure, level, flow, temperature, vibration, acoustic, position, analytical and other sensors collect data and send this collected information to control and monitoring systems via wired and wireless networks.

Over the last several years with the advent of sensors that are wireless, self-powered, non-intrusive, calibration free and maintenance free, production processes can now cost-effectively send information from thousands more sensors to the control and monitoring systems. These sensors help create the IoT for the facility and gives its operating and maintenance personnel a better understanding of overall plant operations.

These control and monitoring systems include distributed control systems (DCSs), asset management systems, enterprise resource planning (ERP) systems, and other specialized software such as vibration monitoring solutions. With expertise and strategic algorithms embedded into the control and monitoring systems, this creates understandable, actionable data for the right person via one of two basic methods:

Collected information is presented to plant personnel and they decide what type of action to take

Action is taken proactively



An example of the first case is displaying temperature values from the inlet and outlet of a heat exchanger along with flow information at a DCS operator screen. Plant personnel could use this information to ascertain if the heat exchanger is working per design. For the second case, specialized software could calculate the inlet/outlet temperature differential, determine the flow rates, continuously analyze this information, and compare it to desired values. This analysis could reveal heat exchanger fouling before any serious degradation in performance, a form of predictive maintenance, and indicate this condition to plant personnel.

Remote experts could be the ones monitoring these conditions and coordinate with the facility to have the maintenance and repair services performed. Pervasive sensing is actively happening with more than 4.3 billion operating hours for Emerson wireless sensors in production facilities around the globe, connected to control and monitoring systems, and delivering improved plant performance.

Event Outcome

Role of IOT
based systems
in the
Automation industry

Chief Guest/Resource Persons

Dr. Munish kumar,
Assistant Prof. Central university
Haryana

IEEE Sponsored webinar on

Public Speaking From Fear up or Gear Up

Fear of public speaking is a common form of anxiety. It can range from slight nervousness to paralyzing fear and panic. Many people with this fear avoid public speaking situations altogether, or they suffer through them with shaking hands and a quavering voice. But with preparation and persistence, you can overcome your fear.

These steps may help:

Know your topic. The better you understand what you're talking about – and the more you care about the topic – the less likely you'll make a mistake or get off track. And if you do get lost, you'll be able to recover quickly. Take some time to consider what questions the audience may ask and have your responses ready.

Get organized. Ahead of time, carefully plan out the information you want to present, including any props, audio or visual aids. The more organized you are, the less nervous you'll be. Use an outline on a small card to stay on track. If possible, visit the place where you'll be speaking and review available equipment before your presentation.

Practice, and then practice some more. Practice your complete presentation several times. Do it for some people you're comfortable with and ask for feedback. It may also be helpful to practice with a few people with whom you're less familiar. Consider making a video of your presentation so you can watch it and see opportunities for improvement.

Challenge specific worries. When you're afraid of something, you may overestimate the likelihood of bad things happening. List your specific worries. Then directly challenge them by identifying probable and alternative outcomes and any objective evidence that supports each worry or the likelihood that your feared outcomes will happen.



Event Outcome

Role of Effective Communication

Visualize your success. Imagine that your presentation will go well. Positive thoughts can help decrease some of your negativity about your social performance and relieve some anxiety.

Do some deep breathing. This can be very calming. Take two or more deep, slow breaths before you get up to the podium and during your speech.

Focus on your material, not on your audience. People mainly pay attention to new information – not how it's presented. They may not notice your nervousness. If audience members do notice that you're nervous, they may root for you and want your presentation to be a success.



Don't fear a moment of silence. If you lose track of what you're saying or start to feel nervous and your mind goes blank, it may seem like you've been silent for an eternity. In reality, it's probably only a few seconds. Even if it's longer, it's likely your audience won't mind a pause to consider what you've been saying. Just take a few slow, deep breaths.

Chief Guest/Resource Persons

Dr. Nazir Ahmad Mir
H&S Deptt K.L University,
Hyderabad

Webinar on Smart Switches

Smart switches in a smart home can make your life easier by allowing you to control all of your devices and lighting. They can be controlled with voice commands or your smartphone, making them useful at any time of the day. Here are some reasons why smart home automation in India is the most effective way to make your home smart.

In today's article, we are going to cover everything about smart switches and the reasons to shift toward them. We will be discovering every aspect of smart switches being a part of smart home automation. So, let's start the discovery!

Five reasons to shift to smart switches

Reason 1

More control over your switches

Connecting your smart switch to another smart device greatly expands your options. For example, 10 minutes before your arrival, put on the lights and air conditioner to allow your smart speakers to play your favorite songs. This can be done with smart switches' geometrical feature. Other smart switch features like mood-setting, turning on appliances without standing, and actually doing with your hands. You can control almost everything in-home with either your smartphone or with your voice control via Amazon Alexa or Google Home.

Reason 2

Save electricity

Everyone wants to save money on their monthly expenses, and the Smart Switches make it feasible. You have the ability to command your system. You can regulate and turn on the heating, air conditioning, and other appliances remotely, just like light bulbs. If you are not at home, you can reduce the temperature to save electricity. Also, if you left any lights on, you can easily control them via smartphone from any corner of the world. There are many ways you can control your smart switches and save electricity by installing motion sensors.



Event Outcome

IOT based smart switches
for different controls

Reason 3

Simplicity and comfort

Smart Switch allows you to control lights, fans, and other smartphone-connected devices. Along with basic switching functions and voice and app dimming, the smart switch can also perform some smart functions such as automatically turning on the light as you enter a room.

Reason 4

Play a big part in your home decoration

Whitelion smart switches are one of the best glass-built smart switches with so much functionality. It is a true functionality with a style statement. Being sleek and elegant, of course, our smart switches gives your home a new look and rich decor at affordable prices. To know more about the prices of whitelion smart switches, contact here.



Chief Guest/Resource Persons

Er. Ramandeep Grover
Techpacs Research and
innovation service, Mohali