Softpro India Computer Technologies (P) Ltd

Workshop Proposal on Python and its Applications with IOT for B.Tech & MCA Students

Softpro Tower, Opposite New Hanuman Temple, Aliganj, Lucknow www.softproindia.org



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About Company:

Softpro India Computer Technologies (P) Limited, an ISO 9001:2015 Certified Company, endowed in 2004 by Technocrats from IIT Kanpur and IET Lucknow, is acknowledged to be one of the aggrandizing IT companies in consulting and software development. It is one of the vigorous new generation software solution company providing software development, maintenance to companies in manufacturing and other domains and also is an acclaimed member of UPDESCO which facilitates software development in government sectors in UP.

The company has gained incredible establishment in the field of software development with more than 200 clients (Domestic & International), with hefty clients like MARC Laboratories, Medicounsel (US), Gas Authority of India Limited, Indian Oil Corporation Limited, Sahara India, Commander Works Engineer (CWE) & Garrison Engineers (Ministry of Defense).

Advisory board, a body that provides non-binding strategic advice to the management of the corporation is a combination of eminent people from academics and corporate on nominal basis like Padmashree Dr Mahendra Bhandari (CEO, Vattikutti Foundation, US), Prof Vinay Kumar Pathak (VC-AKTU), Prof V.K Singh (VC-DDU Gorakhpur University), Prof D.S Yadav (Director-REC Banda), Prof D.K Singh (Director-REC, Azamgarh), Prof Neelam Srivastava (Director- REC Kannauj), Prof K.S Verma (Director- REC Ambedkar Nagar), Prof Manish Gaur (Director- Center for Advanced Studies-AKTU), Er. Manoj Verma (Consultant- Hewlett Packard, Gurugram), Er. Manish Verma (Consultant- Bank of America, US), Er. Virendra Gautam (SAP Project Manager, Gurugram), Er. Rajnikant (Consultant, Infosys Bangalore).

"Softpro Learning Center", commenced in 2008 with a insight to bridge the Technology Gap prevalent between IT students and IT professionals. Softpro Learning Center has embarked itself as one of the most propitious center for learning across UP and nearby states.



Softpro Learning Center includes promulgating Summer Training to B.Tech students, Industrial Training to MCA/BCA students and Apprenticeship Program to pass out students of B.Tech/BCA/MCA. In the year 2017, we had a crowd of more than 2000 students who did their summer training from Softpro, making us the gargantuan learning centers of North India. Furthermore, 60% of the total trainees were placed in popular brands like TCS and Wipro.

Objective of Workshop:

Undergoing the Workshop helps students to get exposed to the Industry and to acquire adequate technical knowledge and know-how thereof. It is not possible for any institution to provide all types of processes, equipment, etc., that are used in various industries. The Workshop therefore provides an opportunity to the students to get exposed to a very large area of technology and its processes. This workshop results in better employment opportunities for students and helps them to acquire better analytical as well as practical approach.

Program Overview:

The very initial step to attain our objective, we come forth with a 'Practical Oriented Workshop on Python and its Applications with IOT.'

This Workshop will provide the ideal time for the future engineers to learn and build projects on the concepts that they will learn. This program will increase the practical skill which is very much needed for core company placements.

The workshop offered by Softpro, involves a specific technology and will help the students to learn. Our experts will expose the students to the latest technologies which industries demand and to increase their practical skills.

Following our innovative methodology, the workshop keeps them engaged throughout the session and offers to learn in the most exciting way.



Workshop Content on Python and its Applications with IOT

<u>Day – I</u>

Phase – 1 (Duration – 3 Hours)

- ✓ Market value of Python
- ✓ Python, Its features.
- ✓ Installing Python.
- ✓ Setting Path.
- ✓ First Python Program.
- ✓ Flow Controls
- ✓ Working with Python List
- ✓ String manipulation in Python
- ✓ Use of function in Python.
- ✓ Working with Modules
- ✓ Object Oriented Programming concepts in Python.

Phase – 2 (Duration – 3 Hours)

- ✓ Introduction of IOT.
- Market value of IOT.
- ✓ IOT as future Technology.
- ✓ Raspberry Pi
- ✓ Physical computing using Raspberry Pi.
- ✓ Structure of IOT
- ✓ Sensors.
- ✓ Application of Python in IOT
- ✓ Demonstration of Project using IOT.

Day - II

Phase -1 (Duration – 3 Hours)

- ✓ CGI Programming.
- ✓ CGI Architecture.
- ✓ Web Server support and configuration.
- ✓ First CGI Program.
- ✓ Use of GET and POST methods for passing information.



- ✓ Use of Cookies.
- ✓ Database concepts (SQL Statements)
- ✓ Database handling in Python (using MySql as backend)
- ✓ Development of Project.

Phase – 2 (Duration – 3 Hours)

- ✓ Development of Registration and Login Modules
- ✓ SMS API Integration
- ✓ Introduction of DJango Framework.

Audience: This workshop is designed for B.Tech (CS/IT) III year and MCA-II year students.

<u>Time frame for workshop:</u> It will be a Two days workshop (approx 05 hrs per day).

Requirements: Conference Hall, Projector, Internet (Wifi), Collar Mic, Laptop for all students.

Regards

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