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Vice President – TECHSYS IOT LABS

Date and Time

: 14.05.2020 @ 11.00am

TOPIC: MOVING FORWARD WITH IoT

TOPIC DISCUSSED:

- Initially started with presentation on recent technologies

AICTE recommended coming up curriculum topics:



CONTENTS

1. Artificial Intelligence
2. Internet of Things (IoT)
3. Blockchain
4. Robotics
5. Quantum Computing
6. Data Sciences
7. Cyber Security
8. 3D Printing and Design
9. Virtual Reality (VR)

- Then various existing problems in the industry faced were discussed.

1. Lack of trained resource, as the technology is getting updated very fast
2. Maintenance overhead cost
3. Complex in lifestyle
4. Global competitive environment
5. Frequent catastrophic effects
6. Availability of the people, in right time
7. Industry/domain specific technology
8. Big gap between R&D activities and implementation in traditional industry
9. Gap between curriculum subjects and industry expectations
10. Focus on industry requirements, during curriculum and bringing awareness to IP rights
11. Connectivity Issues, as each domain follows their own specific ones
12. Compatible issues across various devices
13. Training issues as the generation crosses over to next one
14. Use of older programming languages like C, Ada, Ladder, etc.,
15. Following water-fall kind of methodology

- Next, discussed about existing trends in IoT and factors accelerating IoT.

1. Electronic trends – Sensors, wireless, micro controllers
2. Cloud computing, Big data technologies
3. Mobile applications, smart phone penetration
4. Urgency for smart resources & energy management
5. Open source business model for hardware
6. Open source business model for software
7. Need for better productivity – Efficiency
8. Government friendly policies
9. Cost advantage
10. Consumer is expecting more balance between personal life and business life
11. Support to Big data, predictive analysis, AI and ML
12. Good support in terms of using high level scripting languages like Python, R
13. Faster development life cycle
14. Agile methodology
15. Simple protocols like MQTT, CoAP, HTTP
16. Soon getting 5G technology

- Discussed on Sensor prices, and it have come down from \$1.30 in 2004 to \$0.38 in 2020E. And discussed various sensors, Wireless technologies, IoT application areas and various microcontrollers.

New Innovations (2020) :

Chennai IIT has developed Arduino based mind mapping unit

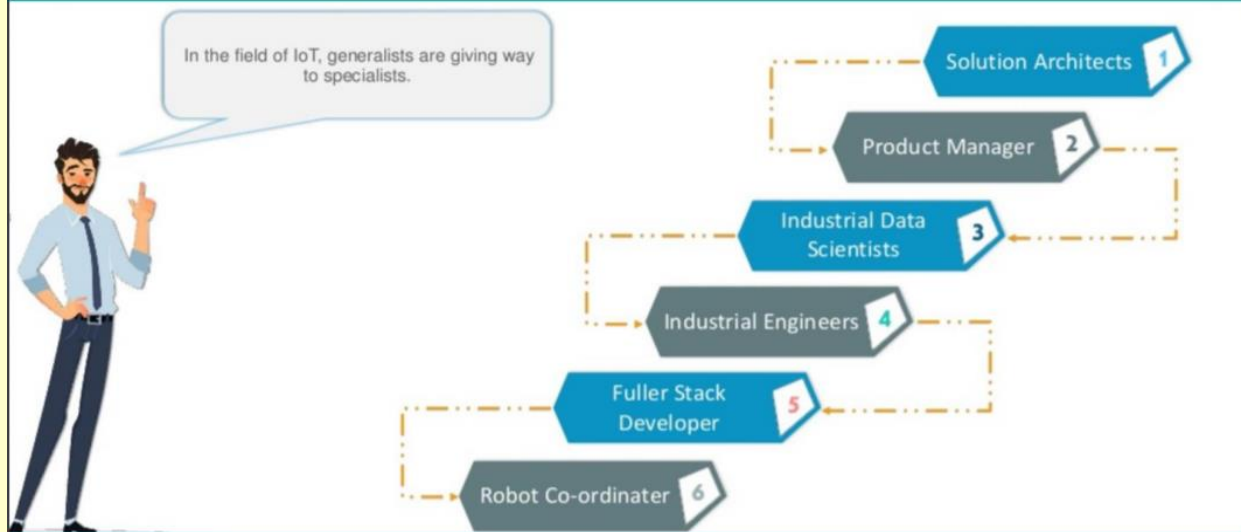


Arduino based ventilator system
from Italy Research firm

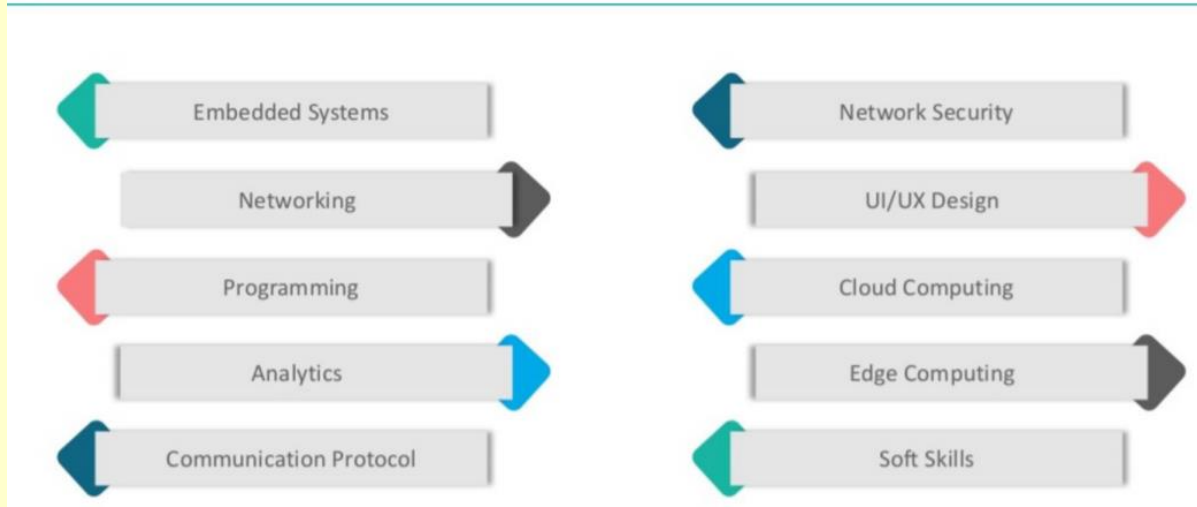


Raspberry Pi based ventilator system from UK

IoT – Emerging Roles



IoT – Skills Required



- **Showed one exciting video on IoT implementation.**
- **Live Demo have shown: Capturing the temperature and humidity in a real time and uploading the data to a cloud-based tool.**
- **Finally Question & Answer sessions**
- **Faculties were asked real time questions and the speaker had given solution for those questions.**
- **Webinar ended with vote of Thanks.**