

IoT

INTERNET OF THINGS

IoT



Digital Lync

EDUCATION - INNOVATION - INCUBATION

01

Welcome To

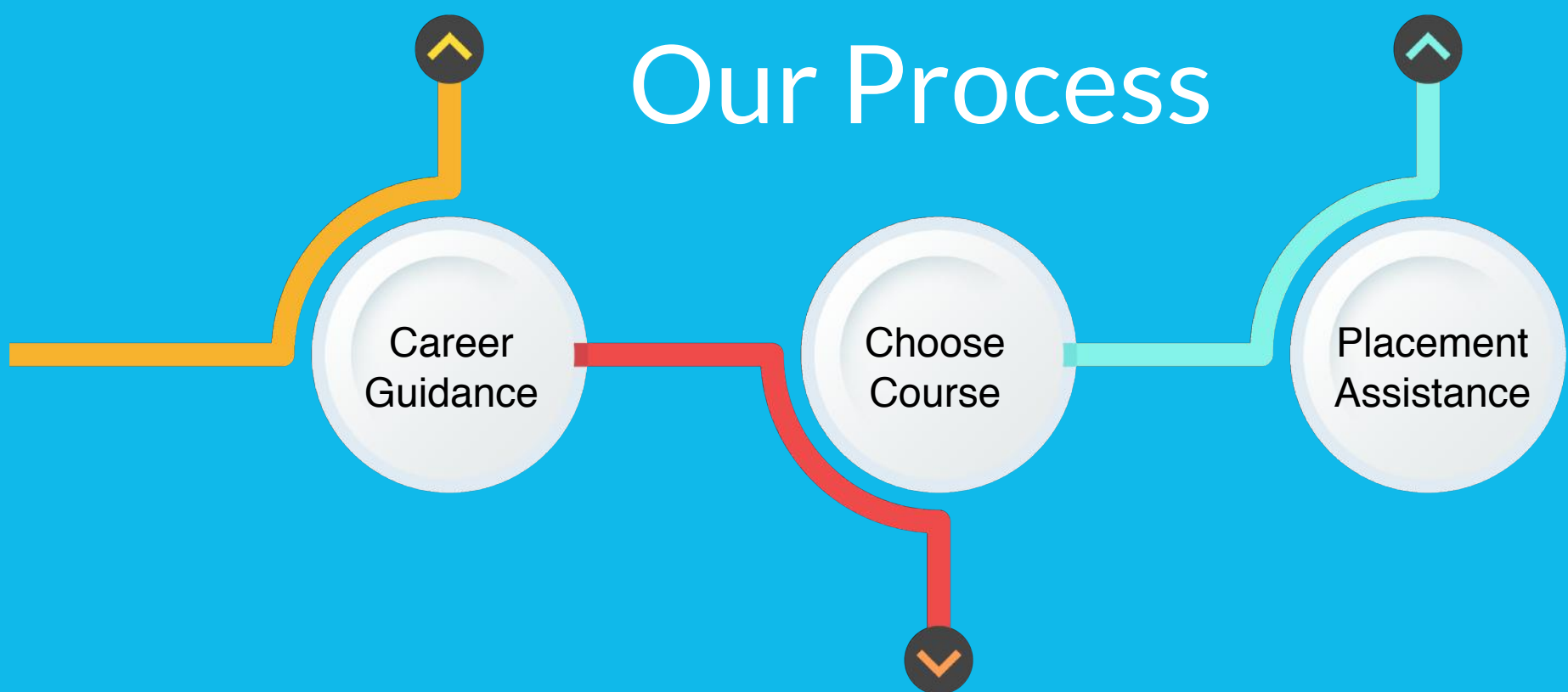
Digital Lync

Digital Lync empowers technology seekers by providing world class infrastructure, best quality project based technology education, Research and Development of great products and supports enthusiastic new entrepreneurs.

Expert counsellor advises to match your skills with trending technologies in the industry.

We are a link to your awesome future! We recognize, enhance and present your skills to the coolest companies.

Our Process



You pick and we guide.
We mentor you all along and
help you throughout
your learning process.

www.digital-lync.com

IOT

The Internet of things refers to a type of network to connect anything with the Internet based on stipulated protocols through information sensing equipments to conduct information exchange and communications in order to achieve smart recognitions, positioning, tracing, monitoring and administration. Here we'll discuss , what is IoT and, how IoT enables different technologies, about its architecture, characteristics & applications.

DURATION: 45+ HOURS

WHAT YOU NEED TO KNOW

- C , C++ , Python as programming language
- Basic understanding of Electronics
- Awareness of Networks and Communications

Why IOT

IoT presents an opportunity for all of us to no longer work off assumptions, but to work off, what is the data revealing, which will make decision making in our daily life much easier. We will continue to see an expanding range of skills within IT and within the broader economy, which will be critical to make this futuristic paradigm a practical reality over the next 10 to 20 years.

CAREER

OPPORTUNITIES

IoT Engineer
IoT Architect
IoT Analyst
IoT Developer



02

IOT

Curriculum

MODULE 1 : **INTRODUCTION TO IOT**

- Introduction to IoT-Concepts and Terminology of the Internet of Things (IoT)
- M2M / IoT standards
- Components of IoT and many more

MODULE 2 : **ELECTRONICS AND SIGNAL FOR IOT**

- Electrical Signals
- Basics of Digital Electronics
- Micro Controllers, Computers, Processors and many more

MODULE 3 : **SENSORS AND ACTUATORS**

- Types of Sensors
- MEMS
- Hands- on with basic Sensors and many more

MODULE 4 : COMMUNICATION PROTOCOLS

- Type of Communication Protocols
- IPv4 addressing problem for IOT and Introduction to IPv6
- Application issues with RF Protocol

MODULE 5 : IOT WORLD

- Overview of IoT Platforms
- IoT Market

MODULE 6 : ARCHITECTURE AND TECH STACK OVERVIEW

- IoT Architecture standard
- Basics of Networking
- Introduction to Fog Computing

MODULE 7 : CLOUD CONCEPTS

- Introduction to Cloud Theory
- Big data Analytics
- Overview of IoT Platforms

MODULE 8 : CHALLENGES AND SECURITY IN IOT

- Security Requirements
- Network Security
- Hardware Security

MODULE 9 : IBOT XT

- Introduction to XT
- XT Hardware Architecture

MODULE 10 : PROGRAMING IBOT XT

- Getting started with Energia and Embedded C.
- Peripherals Programming (UART, RS 232, RS 485,GPIO,ADC,SPI)
- Debugging Techniques

MODULE 11 : IBOT XT IMPLEMENTATIONS

- iBot's Weather Station
- Data Visualisation

MODULE 12 : CASE STUDIES AND POC

- Long range vehicle Detection and Identification
- Employee/ Student Tracking Systems
- Boom Barrier

03

IOT

Project: 1

BOOM BARRIER

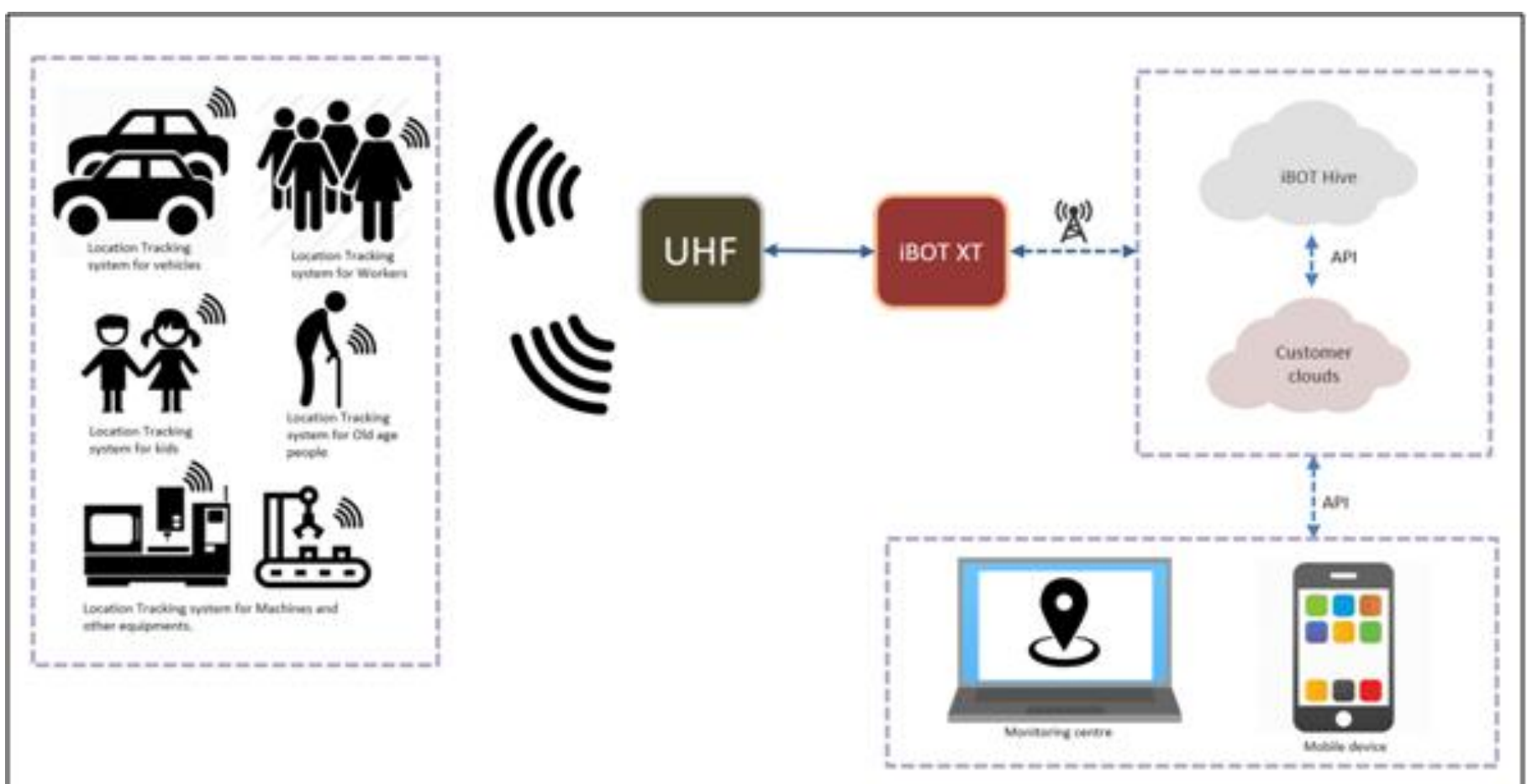
Boom barriers are used to control the movement of vehicles in and out of places like business parks, residential buildings, shopping malls etc. They consist of a pole that blocks vehicles. The purpose of these gates is to stop the entry of vehicles to collect information of the visitor or to check the vehicle before it is let in. At toll booths, this gate is used to restrict the vehicle from driving on before paying the toll fee.



Project: 2

INTEGRATED UHF CARD READER

Applications of Smart Cards include student and employee ID's, highway toll payment, building access management and security, as well as public transportation fee payments. Still, these are only a few of the many potential uses!



04

Why

Digital Lync



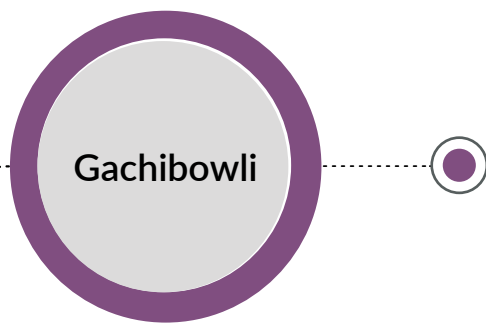
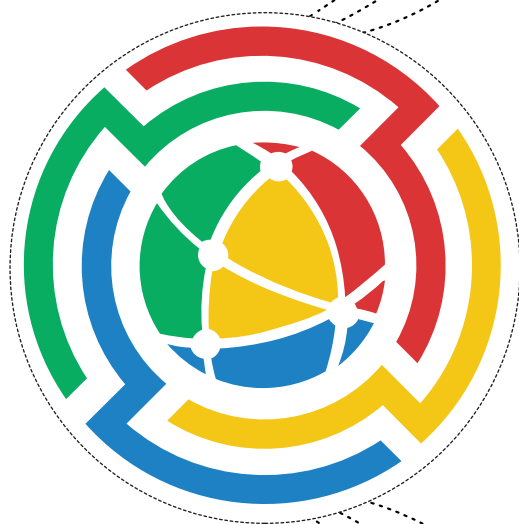
Trending

Technology

Python
Devops
AWS
Azure (Cloud Computing)
Data Sciences
Deep Learning
Artificial Intelligence
Data Analysis
Big Data
Full Stack
Digital Marketing
Mobile Development
Blockchain
Visual Design
Game Development
IOT
Cyber Security

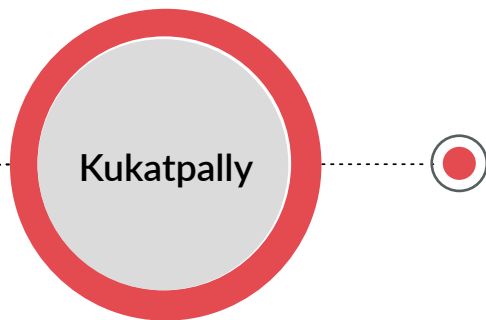
DL

BRANCHES



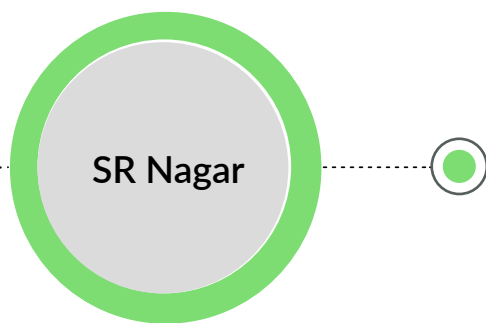
Gachibowli

Khajaguda, Naga Hills Rd,
Madhura Nagar Colony,
Gachibowli, Hyderabad.



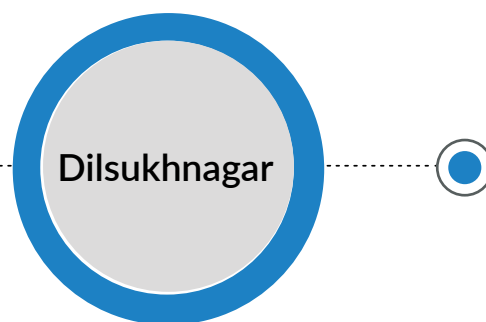
Kukatpally

Manjeera Trinity Corporate,
1st floor, office no. 106 & 107,
Kukatpally, Hyderabad.



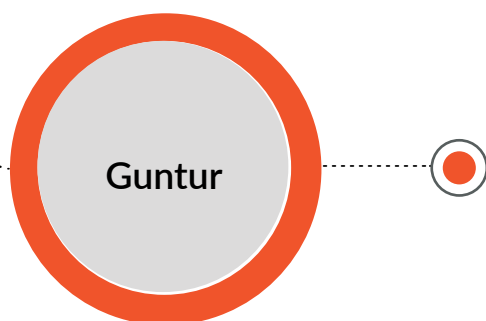
SR Nagar

31/A , Chitti Classics, Adjacent to
SR Nagar Police Station Signal,
Balkampet Main Road,Hyderabad.



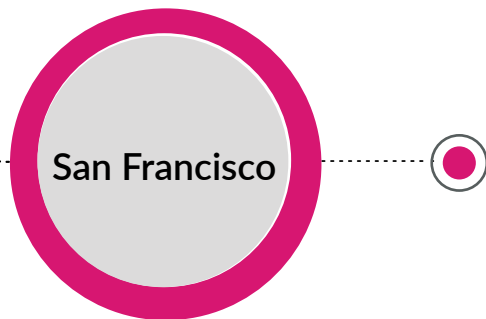
Dilsukhnagar

Near Telephone Colony Arch,
Yashoda Speciality Clinic
Building 3rd floor,
Kothapet, Hyderabad.



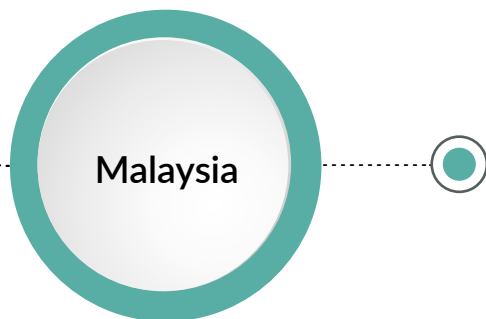
Guntur

Emgee House,
Chandramouli Nagar,
Guntur, Andhra Pradesh.



San Francisco

1 Hallidie Plaza,
San Francisco,
California, 94102.



Malaysia

Block E - 815,
Pusat Dagangan Phileo Damansara 1,
Jalan 16/11, Off Jalan Damansara
46350 PETALING JAYA SELANGOR

CONTACT

www.digital-lync.com

7093861616 / 8897301616

