



3GIRPS

INSTITUTE OF RESEARCH & POLICY STUDIES
BUILD INDIA TO SERVE THE WORLD

**3G INSTITUTE OF RESEARCH AND POLICY STUDIES
PRESENTS**

**90+ HOURS
AI AND IOT**

Venue: IIT Madras Research Park
admin@3girps.org | www.3girps.org | + 91 99624 30308

10 Days Internship – Artificial Intelligence & Internet of Things

DAY 1

- Inauguration
- Psychometric Test
- Introduction to Artificial Intelligence

DAY 2

- Foundations of Statistics
- Basics of Python
- Introduction to Numpy and Pandas
- Hands on session in Python

DAY 3

- Introduction to Machine Learning
- Types of Machine Learning Algorithms
- Introduction to Linear Algorithm
- Hands on session in use case example
- Introduction to Support Vector Machine
- Hands on session in use case example

DAY 4

- Introduction to Image Processing
- Introduction to Open CV
- Hands on session in Image Processing
- Hands on projects in Computer Vision

DAY 5

- Introduction to IBM Cloud Environment
- Hands on session in Image Classification
- Hands on session in Visual Recognition
- Hands on session in Machine Learning Algorithms – Deployment of Bank datasets

DAY 6

- Introduction to Internet of Things
- What is Microcontrollers?
- Difference between Microprocessor and Microcontroller
- Introduction to Arduino Boards
- Types of Arduino Boards
- Installation of Arduino IDE
- Usage of Tinker Cad
- Structure of Coding – Embedded C
- Hands on session in Blinking of LED
- Hands on session in Serial Monitor
- Hands on session in Traffic Signal
- Hands on session in Arduino UNO Board

DAY 7

- Introduction to WiFi Module(ESP8266)
- What is Node MCU?
- Pin Configuration of Node MCU
- Installation of Node MCU and Blynk Library files
- Introduction to Blynk App Open Source Cloud Environment
- Hands on session in connecting Node Mcu with Blynk
- Hands on session in Blinking Inbuilt LED in Node MCU
- Hands on session in Blinking of LED

DAY 8

- What is Sensors?
- Types of Sensors
- Working Principle
- Pin Configuration of Sensors
- Hands on session in Ultrasonic Sensor
- Hands on session in IR Sensor
- Hands on session in Gas Sensor
- Hands on session in PIR Sensor

DAY 9

- Introduction to Motors
- What is DC Motor?
- Working Principle of DC Motor
- Pin Configuration of DC Motor
- What is Servo Motor?
- Working Principle of Servo Motor
- Pin Configuration of Servo Motor
- Hands on session in DC Motor
- Hands on session in Servo Motor
- Hands on session in combination of Sensors and Motors

DAY 10

- Hands on session in Basic Level Projects
- Hands on session in Intermediate Level Projects
- Hands on session in Advanced Level Projects
- Certificate Distribution

GET IN TOUCH WITH US



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admin@3girps.org | www.3girps.org | + 91 70101 52153

HeadQuarters : IIT Madras Research Park, A Block, 6th floor, Kanagam
Road, 32, Tharamani, Chennai, Tamil Nadu 600113

Course Offered

- Internship
- Google AI
- Python
- Ethical Hacking
- Machine Learning - Deep Learning Workshop

DISCLAIMER : IITMRP does not have anything to do with the event and only the venue has been hired for the said event.