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100% JOB  
ABSORPTION  
TRAINING  
PROGRAM

# netsui

# ADVANCED IOT PROGRAM



CERTIFIED OFFLINE  
COURSE



INTERNATIONAL  
PROJECT



EXPERT TRAINERS

[www.netsuilabs.in](http://www.netsuilabs.in)

# ABOUT US



## **Netsui Labs - Pioneers in Advanced Embedded Systems and Analytics Training**

Established as a premier institute with over 12 years of rich experience, Netsui Labs stands at the forefront of providing unparalleled training in Advanced Embedded Systems and Analytics in Chennai. Our legacy is built on a commitment to excellence, practical knowledge, and fostering career growth for individuals aspiring to make their mark in the dynamic IT industry.



# 100% ABSORPTION INTO ZESTLOGICS

Netsui Labs takes pride in announcing a groundbreaking "100% Absorption" into its parent company, Zestlogic Systems. Thus ensuring 100% employment for the candidates. Aligned with our vision of empowering individuals with practical knowledge, Zestlogic facilitates a transition into the IT field, offering opportunities for career growth and success. This approach ensures that Netsui Labs candidates have a direct career path with Zestlogic Systems.

# FEATURES



**TRAINING &  
MENTORSHIPS  
BY INDUSTRY EXPERTS**



**COURSE COMPLETION  
CERTIFICATE**



**INTERNATIONAL  
PROJECTS**



**WELL-EQUIPPED LABS**



**INTERACTIVE  
LEARNING**



**COMPREHENSIVE  
CURRICULUM**



**100% JOB  
GUARENTEED**



**EXPERIENCE WITH REAL-TIME  
INDUSTRY PROJECTS**



**4 MONTH OFFLINE  
SESSIONS**

Column, bar, and pie charts compare values in a single category, such as the number of products sold by each salesperson. Pie charts show each category's value as a percentage of the whole.

Fundraiser Results by Salesperson

PARTICIPANT	UNITS SOLD
Andy	11
Chloe	15
Daniel	9
Grace	14
Sophia	21

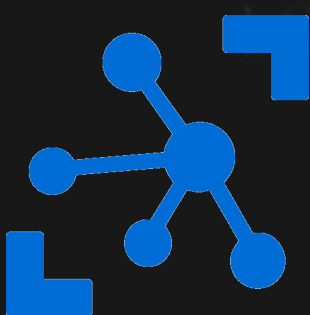
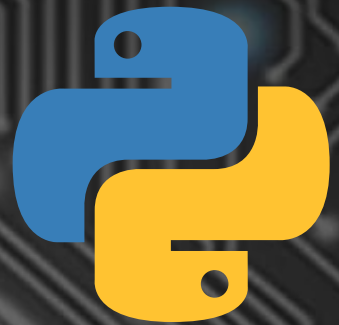
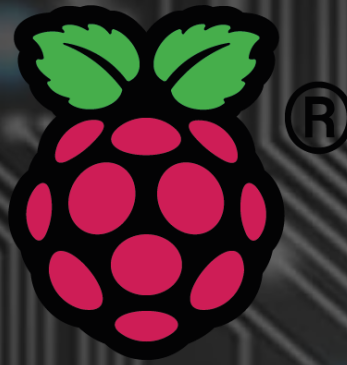
# ABOUT THE PROGRAM

Our Advanced IoT Training Program is a transformative learning journey meticulously crafted for both professionals and enthusiasts eager to unlock the vast potential of the Internet of Things.

This carefully curated curriculum goes beyond the basics, offering a comprehensive exploration of IoT technologies and their practical applications across diverse industries. Immerse yourself in a world where theory meets practice through hands-on projects, case studies, and interactive sessions.

Led by industry experts, our program ensures you not only grasp the fundamentals but emerge as a proficient IoT architect, ready to make a tangible impact in areas such as healthcare, smart cities, agriculture, and industrial automation.

# KEY TOOLS



# MODULES

## HARDWARE PLATFORMS

- **Raspberry Pi:** A versatile, affordable, and widely used single-board computer ideal for learning IoT concepts and prototyping IoT projects.
- **Arduino:** An open-source electronics platform based on easy-to-use hardware and software, suitable for beginners to advanced IoT developers.
- **Raspberry Pi Pico:** A micro-controller board based on the Raspberry Pi RP2040 chip, designed for embedded applications and IoT projects.

## IOT DEVELOPMENT BOARDS

- **NodeMCU:** An open-source IoT platform based on the ESP8266 Wi-Fi module, enabling easy development of IoT applications.
- **Adafruit Feather:** A series of development boards compatible with Arduino, designed for IoT and wireless projects.

## IOT PROTOTYPING KITS

- **Adafruit IoT Starter Kits:** Comprehensive kits that include sensors, actuators, and microcontrollers for hands-on IoT projects.
- **Seeed Studio IoT Grove Kits:** Modular and customizable kits with various sensors and modules for IoT prototyping.

## IOT OPERATING SYSTEMS

- **Raspbian:** The official operating system for Raspberry Pi.
- **Mongoose OS:** An open-source IoT operating system that supports various microcontrollers and provides a JavaScript-based development environment.

# IOT DEVELOPMENT PLATFORMS

- **IoTivity:** An open-source software framework enabling seamless device-to-device connectivity in the IoT.
- **AWS IoT Core:** Amazon's managed cloud service for IoT devices, providing secure and scalable communication between IoT devices and the cloud.
- **Microsoft Azure IoT:** Microsoft's cloud-based IoT platform offering various services for IoT device management, data analysis, and integration with other Microsoft services.

# IOT PROTOCOLS

- **MQTT:** A lightweight and efficient messaging protocol commonly used in IoT applications.
- **CoAP:** A lightweight protocol designed for resource-constrained devices and networks.
- **HTTP/HTTPS:** Standard web protocols often used in IoT for communication between devices and servers.

# IOT DEVELOPMENT TOOLS

- **PlatformIO:** An open-source ecosystem for IoT development, compatible with various development platforms and integrated development environments.
- **Arduino IDE:** The official integrated development environment for Arduino boards, suitable for programming and uploading code to Arduino-based IoT devices.
- **Eclipse IoT:** A set of open-source projects focused on IoT development, including integrated development environments, frameworks, and tools.

# SECURITY TOOLS

- **Wireshark:** A widely used network protocol analyser that helps in analysing and troubleshooting IoT network communication.
- **OpenSSL:** A robust open-source toolkit for the implementation of Secure Sockets Layer (SSL) and Transport Layer Security (TLS) protocols.



# DATA ANALYTICS AND VISUALIZATION TOOLS

- **Python:** A popular programming language for data analysis and manipulation, widely used in IoT projects.
- **Jupyter Notebooks:** An interactive computing environment for creating documents with live code, equations, visualizations, and narrative text, useful for data analysis and exploration.
- **Grafana:** An open-source platform for monitoring and observability, enabling data visualization and analytics in real-time.

# IOT SIMULATORS AND EMULATORS

- **IoTSim-Edge:** A simulator for modelling and simulating large-scale IoT systems and edge computing environments.
- **Eclipse Mosquitto:** An open-source MQTT broker that can be used for local testing and development of MQTT-based IoT applications.