



# INTERNET OF THINGS SECURITY

# About Cognixia

Cognixia- A Digital Workforce Solutions Company is dedicated to delivering exceptional trainings and certifications in digital technologies. Founded in 2014, we provide interactive, customized training courses to individuals and organizations alike, and have served more than 100,000 professionals across 37 countries worldwide.

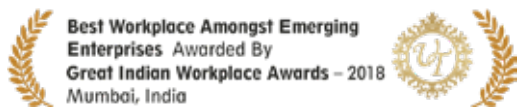
Our team of more than 4,500 industry experts facilitate more than 400 comprehensive digital technologies courses, along with state-of-the-art infrastructure, to deliver the best learning experience for everyone. Our comprehensive series of instructor-led online trainings, classroom trainings and on-demand self-paced online trainings cover a wide array of specialty areas, including all of the following:

- IoT
- Big Data
- Cloud Computing
- Cyber Security
- Machine Learning
- AI & Deep Learning
- Blockchain Technologies
- DevOps

Cognixia is ranked amongst the top five emerging technologies training companies by various prestigious bodies. We're also an MAPR Advantage Partner, Hortonworks Community Partner, RedHat Enterprise Partner, Microsoft Silver Learning Partner and an authorized training partner for Dell EMC, Pivotal, VMware and RSA technologies.



# OUR AWARDS & AFFILIATIONS



# SOME FORMIDABLE NAMES AS OUR TRAINING PARTNERS



**Red Hat**



Silver  
**Microsoft  
Partner**



# THE WORLD OF INTERNET OF THINGS SECURITY

In this era of massive computerization and pervasiveness of IoT technology, security has become a public concern. With the boom in new generation services and products, the demand for IoT security professionals is rapidly increasing. IoT security has been a niche and complex area. There was a time when building a successful career in IoT security would require years of hard work and study. No more. Cognixia's IoT security certifications help you in gaining the IoT security skills in easiest way possible, equipping learners with an array of problem solving skills and analytical capabilities. Rapid adoption of IoT technology in consumer, commercial and industrial sectors is creating new jobs in the market. These roles require current workforce to up-skill themselves by acquiring new skills. This well-devised, highly structured plan will transform you into a competent IoT Security professional. The course has been designed by industry experts who have years of experience and are keen to teach their craft. The course incorporates the latest industry updates and best practices.



# WHO SHOULD STUDY IOT SECURITY?

Cognixia's IoT Security Certification is the most sought after expert level certification.

This is most suitable training program for those whose roles are listed below and who are aspiring for a successful career in cyber security domain:

- Software Developer
- Network Engineer
- Communication Engineer
- Cloud Architects
- DevOps Professionals
- System Engineer
- Database Engineer
- Production Engineer
- Service Engineer
- IT Professionals
- Management Professionals

## ELIGIBILITY / PRE-REQUISITES

Basic knowledge of IoT concepts and technologies.



# LATEST TRENDS IN IOT SECURITY

In the recent global risk report by World Economic, Cybersecurity appeared twice in the list of top five global risks.

In a survey, for the need of secured IoT, conducted across six different countries showed that about 89% respondents desire in-built security in their gadget.

By the year 2020, the number of IoT users is estimated to reach 40 billion. The potential risk of unsecured IoT devices will thus be significant.



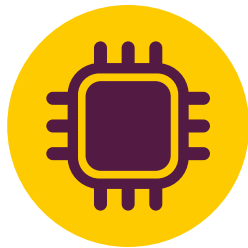
# PROGRAM STRUCTURE & PLATFORMS



24 hours live online training with an Industry Expert Instructor



POC support and multiple assignments to gain thorough understanding



Training within IoT Ecosystem





# DETAILED CURRICULUM:

## **IoT Security Overview:**

- IoT concepts revision
- Introduction to information and cybersecurity
- Basic terminologies
- Standards and open source initiatives
- CIA triads: effectively addressing security and privacy concerns
- Attack surfaces and vulnerabilities: Device, network, Gateway and Cloud
- Risk assessment and management
- Cryptography: Applications of Cryptography in IoT communication and data security
- Threat modeling

## **Device Security**

- Application hardening
- OS/platform hardening
- Physical security

## **Gateway Security**

- Gateway Security

## **Communication protocols and network security**

- Data link layer – Wireless communication technology security provisions  
WiFi, Bluetooth, Zigbee and 802.15.4 protocols
- Application layer security  
MQTT and HTTP protocols
- Network hardening

## **IoT Cloud Platforms**

- API and endpoint security
- Security of data at rest
- Standard security frameworks
- Example platforms: AWS and Microsoft Azure

# COGNIXIA'S KEY DIFFERENTIATORS



LIFETIME LMS ACCESS



24 x 7 SUPPORT



REAL-LIFE PROJECTS & CASE STUDIES



INDUSTRY EXPERTS AS TRAINERS



INDUSTRY STANDARD CERTIFICATE



# EXIT PROFILE

SECURITY ENGINEER- IoT

IoT SECURITY INNOVATOR

IoT WIRELESS SECURITY ARCHITECT

IoT SECURITY DESIGN ENGINEER

IoT SECURITY CONSULTANT

IoT SECURITY ENGINEER

IoT SECURITY ARCHITECT

IoT SECURITY EXPERT



# TESTIMONIALS

“ **ADELINE ERDMAN, UK**

I have been benefited by the basic knowledge of programming. However, the trainers are efficient in their work and provided the best possible training. I thank Cognixia and my trainer for this amazing training.

“ **ROMA MOENS, US**

The live & interactive online session with Industry Expert Instructor was informative and interesting. In all, I had a really nice learning experience from Cognixia.

“ **HARMON BARTOLETTI, PHILIPPINES**

The advanced course of IoT Security Expert is open for all which has made it a great advantage for the new learners. Also, e-learning has eliminated all the geographical constraints. I thank Cognixia for offering this course.

“ **MEGAN SANDERS, AUSTRALIA**

Good going guys, I'm satisfied with the training provided. Being a web developer, I was looking for a course which would meet all my needs.

“ **DIANA MATTHEWS, ROMANIA**

It is only because of the training provided by Cognixia that I have been able to use python to write device, gateway and cloud-based applications and scripts, gain advanced level knowledge to architect, build and implement IoT projects, and many more. Thanks for offering such training.

# Internet of Things Security



To learn more visit  
<https://www.cognixia.com/>