

## **What is IoT Security?**

The Internet of Things refers to adding internet connectivity to interrelated computing devices, digital and mechanical machines, objects, animals, or people. For example, smart televisions, smart speakers, smart appliances, smart air conditioning and thermostats, smart health and medical appliances, and smart home security are all devices that use the IoT. The IoT Security training course provides hands-on training that gives students a competitive edge in IoT security.

Each of the “things” in IoT has a unique identifier and the ability to transfer data over a network automatically. Being able to connect these devices to the Internet makes them vulnerable to cyberattacks when they are not properly protected. IoT security is the area of technology that involves protecting those connected networks and devices that are part of the IoT.

## **What is Involved in this IoT Security Course?**

This IoT Security training provides students with the fundamental concepts of the Internet of Things, including security issues, use cases of cyberattacks involving the IoT, and common technologies and components related to the IoT. Upon the completion of the course, students will have a strong baseline understanding of the devices and systems that need to be protected.

This course can also help students prepare for an IoT Security Certification.

## **Who Should Take the IoT Security Course?**

This IoT Security course is ideal for professionals working with IoT products, including project managers, systems and software engineers and managers. It is also a good fit for any IT or cybersecurity professionals who want to learn about the unique attributes and challenges of IoT security.

## **Why is IoT Security Important?**

With the advent of the IoT, new vulnerabilities and possibilities were made available to hackers. Some of the more critical vulnerabilities that have been found on IoT devices and networks have demanded that IoT security be addressed quickly. More connected devices mean more cyberattack methods and more ways for cybercriminals to take advantage of the relative newness of IoT.

Hackers have already used IoT baby monitors, cars that are Internet-connected, IoT wearables (like smartwatches), and even IoT home security systems to commit various nefarious acts. Monitoring live feeds and changing camera settings, taking control of a car’s entertainment system, shutting off a car that is being driven, and obtaining personal information from wearables are all attacks that have been carried out.

Some of the scariest IoT hacks have been carried out on medical devices (like pacemakers). Cyberattacks like these can be extremely detrimental, even fatal, to patients.

You can see why it's so important to have IoT security professionals protect consumers of IoT products. Technology continues to grow at amazing speed, and with every innovation, cybercriminals appear and take advantage of individuals, organizations, and society at large. Becoming knowledgeable about IoT devices and networks will help ensure that the use of these convenient and modern products doesn't open people and companies up to security threats.

## **Why Take this IoT Security Training?**

With the explosive growth of Internet-connected devices, the world has become faster, but cybercriminals have also become smarter. In this IoT Security training, students will use state-of-the-art technologies to learn how to perform risk and vulnerability assessments, and how to find and suggest strategies to mitigate these risks.

The entire IT industry as a whole is experiencing a shortage of professionals available to fill open positions. IoT Security professionals are not an exception, and adding this training and knowledge to an IT skill-set will certainly put IT job candidates ahead of the pack.

The IoT will only continue to grow, which means that the demand for professionals with this knowledge will continue to be in demand. Cybersecurity positions are some of the highest paid IT jobs available, and with the current shortage of professionals to fill those roles, it puts cybersecurity professionals at a great advantage. Higher earning potential, job security, and advancement opportunities are all solid reasons for adding an IoT Security certification to their cybersecurity tool-belts.