Source : https://www.futureoftech.org/internet-of-things/6-career-opportunities-in-iot/

The internet of things (IoT) is revolutionizing every industry, from home appliances to agriculture to space exploration.

Since the advent of cloud computing, we've seen an exponential growth in the number of sensor-enabled devices connected to the internet.

From engineering and development to product testing and device security, the IoT already needs many hands on deck and will be actively expanding its workforce as society becomes more and more connected.

## Career Fields Within IoT

Any given IoT device includes several interconnected systems, and for each device someone has to build and integrate all those systems. Developing an IoT product involves hardware design, hardware testing and integration of the hardware with the firmware. Then the hardware and firmware have to be integrated with the software, and all those things must be integrated with the network and the server back end. An IoT device isn't just an application that lives locally on a desktop computer or smartphone; with IoT devices, you have to design all of the infrastructure around them, too.

It's easy to see where cybersecurity professionals fit into the IoT, when you consider how insecure IoT devices are currently. It can be easy to feel alarmed about the IoT, but it's also exciting to imagine how much the IoT will change the world in the coming years. With a skilled IoT workforce, we can make that transition smooth and safe for all.

Security professionals around the world are pushing for greater security education.

## IoT/Cloud Software Developer

Without software, the IoT wouldn't exist. Software developers are integral to the production of IoT devices. CompTIA Cloud+ will give you the experience you need in cloud-based infrastructure services.

Education requirement: CompTIA Cloud+ and/or A+ certification and experience

Also acceptable: Bachelor's degree in information technology or information networking

Annual salary: $73,000

## IoT Infrastructure Architect

IoT infrastructure architects solve business problems by implementing IoT devices such as intelligent sensors, security appliances and networking devices. Cloud+ certification teaches you to maintain and optimize cloud infrastructure services, and Server+ certification covers the latest server technologies, giving you the skills you need to be a successful infrastructure architect.

Education requirement: CompTIA Cloud+ and Server+ certification and experience

Also acceptable: Bachelor's degree in information technology or information networking

Annual salary: $100,000

## IoT Systems Administrator

As in any industry, systems administrators are crucial to the success of the IoT. The Cloud+ certification covers the increased diversity of knowledge, skills and abilities required of system administrators.

Education requirement: CompTIA Cloud+ certification and experience

Also acceptable: Bachelor's degree in information technology, computer science or computer engineering

Annual salary: $72,000

## Vulnerability/Cyber Engineer

Cybersecurity starts at the ground level, where security administrators manage security solutions, monitor the network and roll out patches. Everything you need to know for this job is covered by CASP certification, which provides performance-based certification for practitioners at the advanced skill level of cybersecurity.

Education requirement: CompTIA CASP certification and experience

Also acceptable: Bachelor's degree in information technology, computer science or computer engineering

Annual salary: $84,000

## Test Engineer

IoT products, like all other sophisticated information technology devices, need someone to verify and validate that they're functioning properly once they've been fabricated.

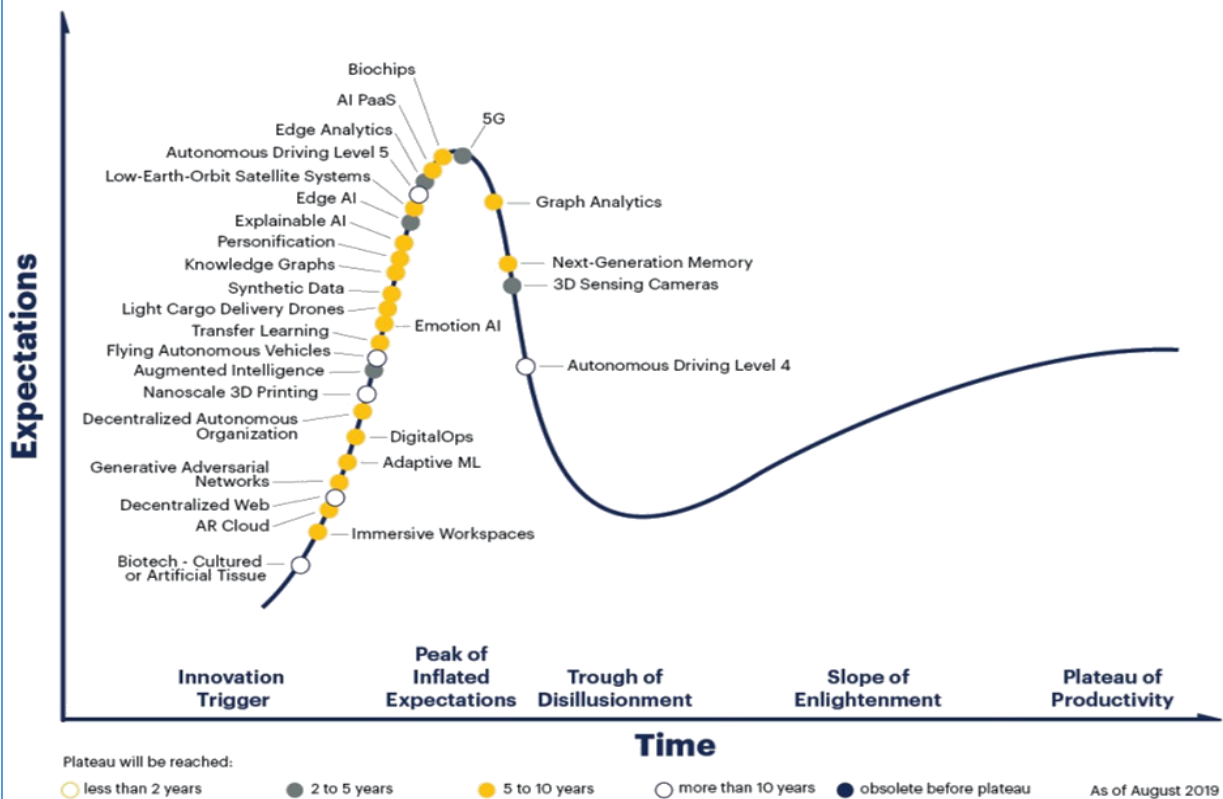Education requirement: CompTIA Network+ certification and experience

Also acceptable: Bachelor's degree in information technology, computer science or computer engineering

Annual salary: $62,000

# Looking for a job ?

## Try IoT
## +1000%

*Percentage of Matching Job Postings (%)* — 0.000 to 0.024, years 2014, 2015, 2016, 2017

# Gartner Hype Cycle for Emerging Technologies, 2019

**Expectations** (vertical axis)

Biochips
AI PaaS
5G
Edge Analytics
Autonomous Driving Level 5
Low-Earth-Orbit Satellite Systems
Edge AI — Graph Analytics
Explainable AI
Personification
Knowledge Graphs — Next-Generation Memory
Synthetic Data — 3D Sensing Cameras
Light Cargo Delivery Drones
Transfer Learning — Emotion AI
Flying Autonomous Vehicles
Augmented Intelligence — Autonomous Driving Level 4
Nanoscale 3D Printing
Decentralized Autonomous Organization
— DigitalOps
Generative Adversarial Networks — Adaptive ML
Decentralized Web
AR Cloud
— Immersive Workspaces
Biotech - Cultured or Artificial Tissue

**Innovation Trigger** | **Peak of Inflated Expectations** | **Trough of Disillusionment** | **Slope of Enlightenment** | **Plateau of Productivity**

**Time**

Plateau will be reached:
○ less than 2 years  ● 2 to 5 years  ● 5 to 10 years  ○ more than 10 years  ● obsolete before plateau    As of August 2019

**gartner.com/SmarterWithGartner**

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