

IoT Fundamentals: Big Data & Analytics

For completing the Cisco Networking Academy® Big Data & Analytics course, and demonstrating the ability to perform the following:

- Explain the value of data analytics for an IoT solution.
- Describe and Apply the data analysis process to solve a problem.
- Apply Python scripts to collect, prepare, analyze and visualize or export data.
- Apply basic machine learning algorithms.
- Apply data visualization and storytelling techniques to communicate results of analysis.
- Describe approaches to data management including SQL and No-SQL solutions.
- Explain the fundamental concepts behind the main Big Data platforms.

Alfonda Dimas Cahaya

Student

Fakultas Teknik, Universitas Indonesia

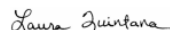
Academy Name

Indonesia

Location

14 Dec 2023

Date



Laura Quintana
VP & General Manager, Cisco Networking Academy

IoT Fundamentals: Connecting Things

For completing the Cisco Networking Academy® Connecting Things course, and demonstrating the ability to perform the following:

- Explain how IoT technologies are transforming Business and Society.
- Use sensors, actuators and micro-controllers (Arduino) to prototype an IoT solution.
- Use Python, Cisco PL-App and Raspberry Pi to prototype an IoT solution.
- Describe the role of Network and Fog Computing in an IoT solution.
- Describe how IoT Solutions can be used to digitise business applications or address social problems.
- Diagram a business model for a given business or social endeavour using the Business Model Canvas.

Alfonda Dimas Cahaya

Student

Fakultas Teknik, Universitas Indonesia

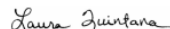
Academy Name

Indonesia

Location

14 Dec 2023

Date



Laura Quintana
VP & General Manager, Cisco Networking Academy

IoT Fundamentals: Hackathon Playbook

For completing the Cisco Networking Academy® IoT Hackathon, and demonstrating the ability to perform the following:

- Empathize with users and get insights to solve a problem.
- Define a problem and brainstorm solutions.
- Create an IoT prototype.
- Create a Business Model Canvas.
- Present the solution to the judging panel and demo the prototypes.

Alfonda Dimas Cahaya

Student

Fakultas Teknik, Universitas Indonesia

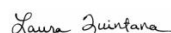
Academy Name

Indonesia

23 Jan 2024

Location

Date



Laura Quintana
VP & General Manager, Cisco Networking Academy

IoT Fundamentals: IoT Security

The student has successfully achieved student level credential for completing Cisco Networking Academy® IoT Security course administered by the undersigned instructor. The student was able to proficiently:

- Articulate specific security challenges related to the Internet of Things.
- Perform threat modeling activities on an IoT system at physical, communication and application layers.
- Use Kali Linux penetration testing tools to identify vulnerabilities in IoT systems.
- Apply threat modeling and risk assessment frameworks and recommend threat mitigation measures.
- Explain the impact of emerging technologies on IoT Security.

Alfonda Dimas Cahaya

Student

Fakultas Teknik, Universitas Indonesia

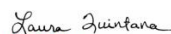
Academy Name

Indonesia

14 Dec 2023

Location

Date



Laura Quintana
VP & General Manager, Cisco Networking Academy