

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.

Oksana Kovalchuk

Student

National Transport University

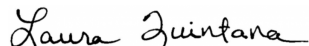
Academy Name

Ukraine

Location

19/12/2023

Date



Laura Quintana
VP & General Manager, Cisco Networking Academy

Emerging Technologies Workshop - Experimenting with REST APIs using Webex Teams

The student has successfully achieved student level credential for completing Emerging Technologies Workshop - Experimenting with REST APIs using Webex Teams administered by the undersigned instructor. The student was able to proficiently:

- Explain the concept of APIs and the importance of RESTful APIs for software integration.
- Use Cisco Spark for Developers to execute a variety of API calls.
- Use the Postman application to execute common calls to the Cisco Spark REST API.
- Use Python to automate Cisco Spark tasks and build a simple automation bot.

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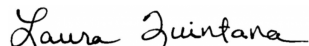
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12/12/2023

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Laura Quintana
VP & General Manager, Cisco Networking Academy

Statement of Achievement

PCAP: Programming Essentials in Python

The graduate of the *PCAP: Programming Essentials in Python* course, administered by the undersigned instructor, and provided by **Cisco Networking Academy**[®] in collaboration with **OpenEDG Python Institute**:

- knows the universal concepts of computer programming, including variables, data structures, algorithms, control flow, functions, and exceptions;
- can proficiently use the developer tools, the runtime environment, and the syntax and semantics of the Python language;
- can use fundamental programming techniques, best practices, customs, and vocabulary, including the most common standard library functions in Python 3;
- can write Python programs using standard language infrastructure, and knows the means by which to resolve typical implementation problems;
- knows how to work with modules and packages, process text and binary files, and use generators, iterators, and closures;
- understands the fundamentals of object-oriented programming (OOP) and the way they are adopted in Python.

Oksana Kovalchuk

Student

National Transport University

Academy Name

Ukraine

Location

02/10/2023

Date

Laura Quintana

Laura Quintana
VP & General Manager, Cisco Networking Academy