



Study Guide for Week #10

Module 10: Cloud Integration with physical systems

Material Outline

- (1) Introduction to technology trends
- (2) Integration of Clouds, Big Data considering the IoT
- (3) Cloud-based Internet of Things
- (4) Challenges for future standardization
- (5) Conclusion

Provided Documents

Documents	Description
Week10-WatchMEfirst	Video explaining the goals of this week
Week10-StudyGuide.pdf	The guiding documents for the materials covered in this week, student work, and learning outcomes of this week.
Week10-Slides.ppt	PowerPoint slides regarding cloud integration with physical systems
Week10-Lecture	Video Lecture
Week10-PaperReading	Paper about “Integration of Internet of Things and Cloud Computing: A systematic survey”
Week10-Resources: Video - > Integrate azure and raspberry pi: Send data	An interesting video that shows a practical example of how to send data to azure from a raspberry pi
Week10-Resources: Reading -> Cloud IoT step-by-step	A reading explaining step by step how to connect Raspberry Pi with Cloud

Documents	Description
Week10-Resources: Reading -> Using Industrial Raspberry Pi as Device-to-Cloud solution	A reading of how to send data to the cloud and how Raspberry Pi can be used as a Device-to-Cloud solution
Week10-Checklist	A checklist for your reference

Student Assignments

- Digest PowerPoint slides
- Watch the Lecture (or attend the in-person lecture)
- Read the Week 10 Material (All readings and papers provided)
- Watch explicative videos
- Complete Quiz #3

Learning Goals

This module is part of the learning outcomes

- (1) Understand terminology related with Cloud-based IoT
- (2) Test how to send data to the cloud from an IoT device