



## Study Guide for Week #3

### Module 3: Principles of Secure Architecture on IoT

#### Material Outline

- (1) Physical Computing Architecture
- (2) Physical Small Computers for IoT
- (3) Arduino
- (4) Beagle Bone Black
- (5) Raspberry PI
- (6) IoT Security Framework
- (7) IoT Platform Security Tools

#### Provided Documents

Documents	Description
Week3-WatchMEfirst	Video explaining the goals of this week
Week3-StudyGuide.pdf	The guiding documents for the materials covered in this week, student work, and learning outcomes of this week.
Week3-Slides.ppt	PowerPoint slides regarding the principles of secure architecture on IoT
Week3-Lecture	Video Lecture
Week3-PaperReading	An interesting paper related to “DESIGN AND IMPLEMENTATION OF RASPBERRY HOUSE: AN IoT SECURITY FRAMEWORK”
Week3-Resources -> Video: What is a Raspberry PI	An explicative video about what is a raspberry pi and some examples of what you can do with a raspberry pi

<b>Documents</b>	<b>Description</b>
Week3-Resources -> Video: What is an Arduino	A video with an explanation of what is an Arduino and how it senses the world
Week3-Resources -> Reading: IoT Security Architecture	A reading about IoT Security Architecture
Week3-Checklist	A checklist for your reference

## **Student Assignments**

- Digest PowerPoint slides
- Watch the Lecture (or attend the in-person lecture)
- Read the Week 3 Material (All readings and papers provided)
- Watch explicative videos
- Complete Lab #1

## **Learning Goals**

This module is part of the learning outcomes

- (1) Describe the principles of Secure Architecture IoT
- (2) Differentiate between different types of computer boards
- (3) Perform initial implementation on Raspberry Pi emulators