Learning Level

- Advance

Course Duration

- 3 Days

Course Outline

Introduction to IoT:

- Security Architecture
- Getting Familiar with IoT Security and Components
- Case Studies of IoT Vulnerabilities

Hardware Analysis:

- Hardware Hacking 101
- Analyzing Boards and Components
- Identifying Serial Interfaces
- UART, SPI and JTAG Primer
- Extracting Firmware from a Real Device
- Common Techniques to Prevent Hardware Attacks
- Bypassing Hardware Protections
- Side Channel Attack Techniques

Firmware Analysis:

- Understanding File Systems
- Firmware Extraction Techniques
- Analyzing and Backdooring Firmwares
- Simulating and Running
- Firmwares and Binaries
- Debugging Firmware Binaries
- Identifying Vulnerabilities in Firmwares

Exploitation:

- ARM Architecture Introduction
- Registers and Flags
- Disassembling and Debugging Binaries
- Common Exploitation Techniques
- Ret2Libc Techniques for ARM Based Architectures
- Gadget Hunting and Chaining
- ROP Exploitation

Mobile Application Hacking:

- Introduction to Android and iOS App Security
- Reversing and Analyzing Android Applications
- Real time Debugging Android Applications
- Analyzing Native code and Libraries for Security Issues
- Automating Application Analysis
- iOS App Reversing and Decryption
- Runtime Manipulation of iOS Applications

For More Information & Registration, Please Contact Training Division
Tel:(66) 2253-4736, Fax:(66) 2253-4737, Hotline:(66) 86-325-7129, E-mail: registration@acisonline.net

IOTP - Internet of Things (IoT) Penetration Testing: Course Outline

Obfuscation Techniques and Bypassing Protections

Radio Hacking:

- Getting Started with SDR
- Radio Interfaces and Architecture
- Setting up the Pentesting Lab for Radio Hacking
- Getting familiar with GNURadio and Other Tools
- Capturing and Streaming Radio Signals
- Overview of Bluetooth and Wifi Connections
- Attacking BLE and Wifi

Official Training Partner

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