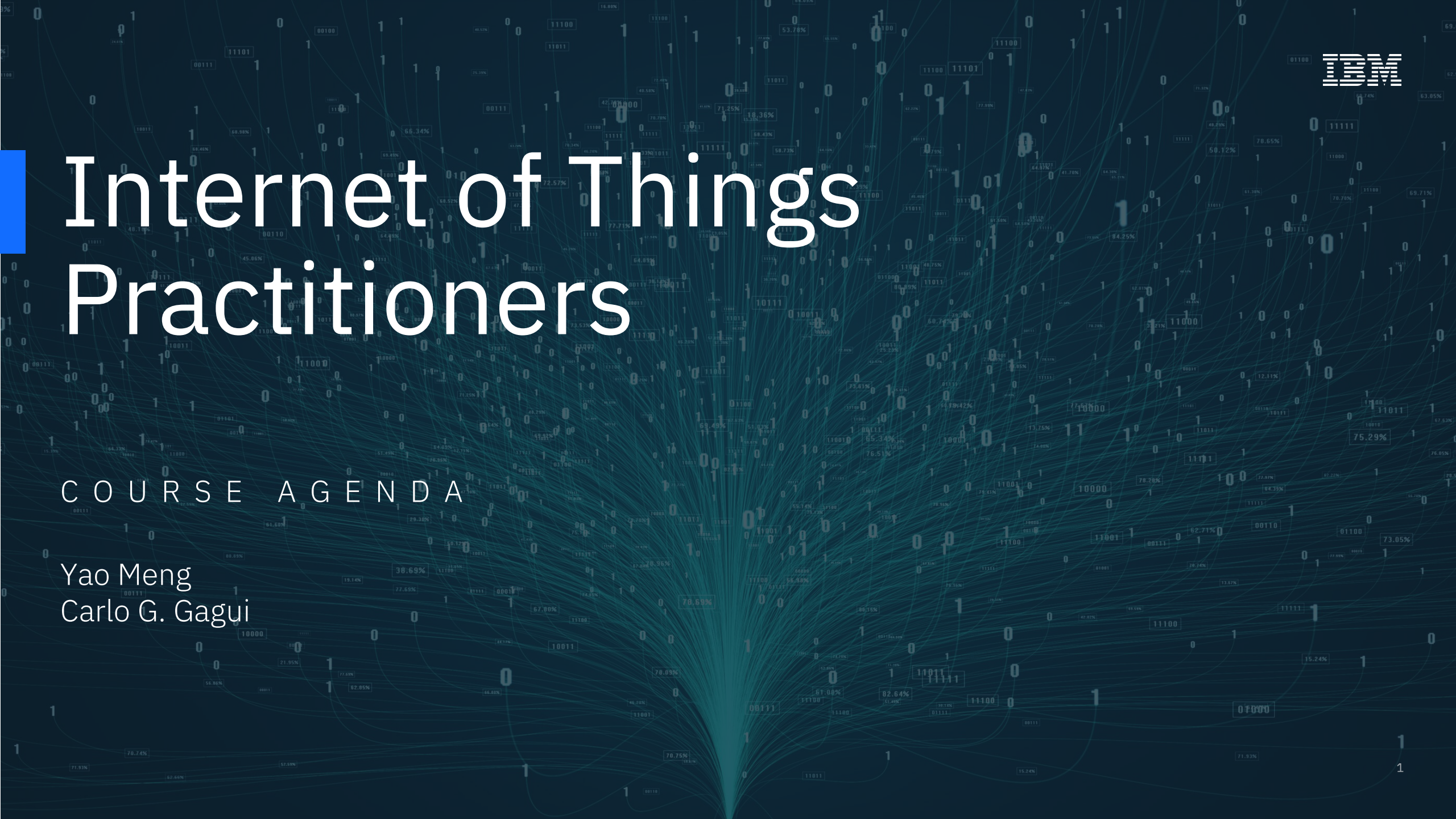

Internet of Things Practitioners

COURSE AGENDA

Yao Meng
Carlo G. Gagui

Objectives

- Understand the **history and evolution** of IoT
- Develop a **technical understanding of IoT** and how it works
- Learn from **industry's experience** on IoT use cases
- Have a deeper understanding of **technical tools** such as RaspberryPi, GrovePi, Node-RED, Watson IoT and how they are used in real application
- Be able to **design and develop** a prototype on RaspberryPi with GrovePi
- Be able to **propose solutions** to real world scenarios leveraging IoT methodologies and technologies

// PREREQUISITES

Individuals with an active interest in applying for entry level jobs relevant to implementing IoT technology.

This course has no prerequisites beyond basic IT literacy and a familiarity with programming techniques.

Topics covered

Concepts

- What is IoT
- State of IoT
- Important Use-Cases

Applications

- Selecting use-cases
- Designing use-cases
- IoT projects
- Modelling applications

Technology

- Technical concepts
- Developer Tools

Practices

- Platforms
- Architectures
- Building
- Deploying

...taught using a combination of **lecture, lab,** and **exercise**

Agenda

Day 1	Day 2	Day 3
Lecture 1: Introduction to Internet of Things(IoT)	Lecture 4: Working with Node-RED and GrovePi Sensors	Lecture 7: Node-RED Dashboard
Lecture 2: Raspberry Pi and GrovePi	Lecture 5: IBM Cloud	Lecture 8: Working with Notifications
Lecture 3: Introduction to Node-RED	Lecture 6: Watson IoT, Node-RED on Cloud and MQTT	Lecture 9: Build an Industrial IoT Application
Lab 1: Node-RED Application	Lab 2: Working with Sensors sending to IBM Cloud	Lab 3: Building Final IoT Website


IBM®