



MINING INTERNET OF THINGS DATA

BEIYU LIN



COURSE INFORMATION

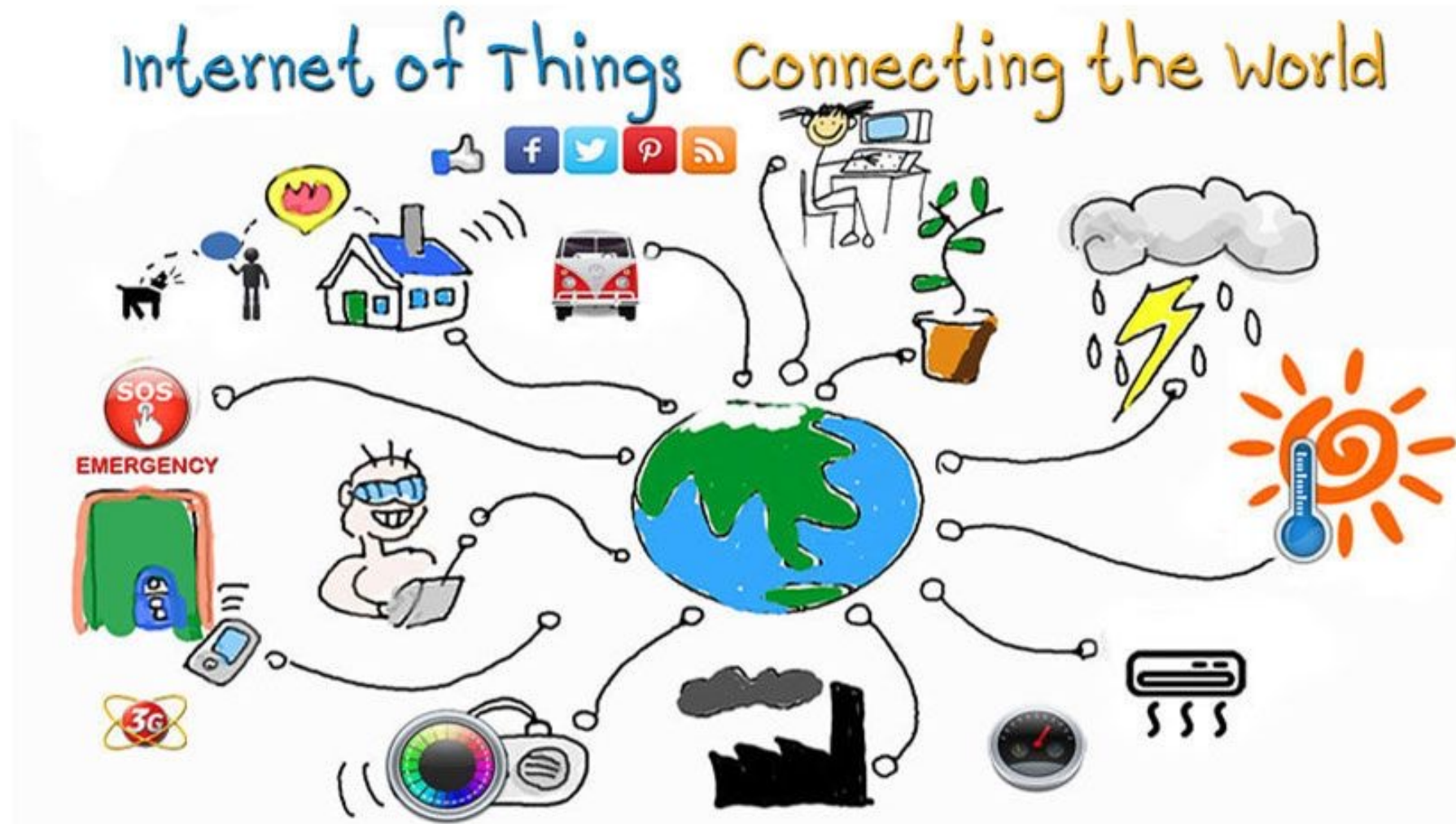
Outline: https://beiyulincs.github.io/teach/spring_22/iot.html

Syllabus: https://beiyulincs.github.io/teach/spring_22/syllabus_cs_789.pdf

OUTLINE

- **What is IoT?**
- **What is IoT Data?**
- **Why IoT is important?**
- **Topics and outline of this course**

WHAT IS IOT?



WHAT IS IOT?

The Internet of Things (IoT):

- the billions of physical devices around the world that are now connected to the internet, all collecting and sharing data
- merging the digital and physical universes
- e.g., from a pill to aeroplane

WHY IOT IS IMPORTANT

“If you invent a breakthrough in artificial intelligence, so machines can learn, that is worth 10 Microsofts.” — Bill Gates



“As the Internet of things advances, the very notion of a clear dividing line between reality and virtual reality becomes blurred, sometimes in creative ways..” – Geoff Mulgan



“I think we should be very careful about artificial intelligence. If I had to guess at what our biggest existential threat is, I’d probably say that. So we need to be very careful.”– Elon Musk

TOPICS IN THIS COURSE

- Smart environment (home/building/city)
- Smart healthcare
- Agriculture and climate
- Transportation
- Sports and other industry

TOPICS IN THIS COURSE

- Each topic will cover:
 - Data properties
 - Algorithms
 - Coding (python)
 - Guest lecture