IoT Fundamentals

A Practical Session on Building an Air Quality IoT Network

Engineer Bainomugisha

Department of Computer Science, Makerere University, Uganda baino@cis.mak.ac.ug





Objective

to build an IoT node/network and develop simple data analytics & visualisations

What we will cover

- Introduction to IoT
- Building an IoT node for air quality monitoring
- data analysis and visualisation of IoT collected data

Session Materials

http://airqo.net/dsa

What is IoT?

What is IoT?

"a network of devices "things" embedded in the physical environment"

loT for air quality monitoring





Why air quality matters?

Air pollution effects

9 out 10 people breathe polluted air



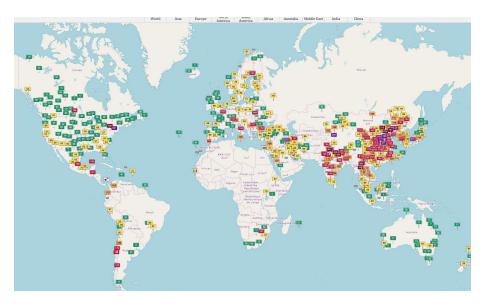
7 million deaths every year



Internet source

Severe shortage of air quality data

There is a severe shortage of data on air pollution in many low and middle-income countries



Source: http://agicn.org (April 27, 2019)

