Air quality measurement and "Internet of Things" in the STEM classroom practice

B. Huyskens¹

¹ SJI Schoten, Antwerpen, Belgium

Abstract

CO2, NO2 and Fine Dust are "hot topics". Two Electronics teachers developed a set of really good IOT sensors that can perform these and many other measurements in a unique way.

All developed smart-sensors link their measured data automatically via WiFi to a specially developed cloud application. This application allows students from anywhere to view this data in graph or spreadsheet. Everything is developed by teachers for students and school applications.

Many other popular sensors in chemistry and physics labs can also be connected to this Internet Of Things cloud platform.

These Smart Sensors will be available in Q4 2019. They will come with extensive courseware and access to the could platform.

During this session you will receive a nice demonstration of the many possibilities of this unique system.

Bart will also demonstrate clear and achievable project idea's to link science with engineering by utilizing these sensors, app development software and Arduino. It might inspire you to get started in your class afterwards.

Notes:

Bart is an electronics teacher at SJI Schoten (Antwerp) with a specialization in hardware and product design. Bart is also a promotor of well-considered STEM education www.e2cre8.be – www.stemzone.be