

IoT, Big Data and AI: Innovating STEM Teaching Through Strengthening Teacher Professionalisation

Technical Training Session #4: “Introduction to ScienceScope’s IoT Devices, The Weather Station, and its Relevance to STEM Learning”

Wednesday, 27 October 2021 | 13:30 – 15:00 (CEST)

Join Us at the Technical Training Session:

<https://zoom.us/j/437007825?pwd=K2I2QU1FdWFkN3YzWEFwNzMrUjBFUT09>

Password: classnet

Introduction

In this session we will be expanding on the knowledge learnt from the first session by starting to visualise data. Once the data has been visualised, we will then be looking at the tools the Exploratory has to offer and how to use them effectively. This includes looking at different graph types and how combining sensors onto a single graph can show cause and effect.

We will also be demonstrating features that allows users to download the data and use other tools such as Excel and MATLAB.

A feedback part will also be conducted where you will be able to tell us what you think and what features you might like to see in the future.

This is a link to the data we will be analysing in this session
<https://exploratory.sciencescope.uk/graphing/?deviceID=MB102932,MB103068&startTime=2021-08-01T09:57:43&endTime=2021-09-01T09:57:43&attempt=0&interval=60>

About the Speakers & Facilitators



Dr David CRELLIN
CEO & Founder
ScienceScope Ltd

David was educated at the University of Bristol and the University of Cambridge. He has over 30 years of expertise in the EdTech sector, ranging from consultancy, research to entrepreneurship. David holds directorships in EdTech businesses in the UK, South Africa and Singapore. As the founder of ScienceScope, he collaborated with BBC on a nationwide and award winning micro:bit project.



Mr Josh WRIGHT
Software Engineer
ScienceScope Ltd

Josh is currently a Software Engineer at the ScienceScope Limited. He graduated from the University of Bath with BSc Honours in Computing in 2016. He is responsible for the overseeing of the design, implementation, and development of ScienceScope's IoT sensor system (IoT @ School) built on the Microsoft Azure platform. He is also responsible for conducting research in different sensing solutions and how new sensors can be integrated in the ScienceScope system during the product development phase. It includes the design and testing prototypes which could then become a finalised product. Joshua is also specialised in using 3D design software and 3D printers to rapidly prototype the designs and ideas while maintaining the lower cost of development.

Recommended Reading List

Visit sites like the [Wow Met Office UK](#) web site and see how other systems share and compare data. Met Office WOW - Home Page with a view to discussing how our system compares during a discussion.

<https://www.influxdata.com/what-is-time-series-data/>

<https://www.gartner.com/en/information-technology/glossary/iot-platforms>

<https://searchcloudcomputing.techtarget.com/definition/Windows-Azure>

<https://www.telenorconnexion.com/iot-insights/what-is-iot-guide/>

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/library-and-archive/library/publications/factsheets/factsheet_14-microclimates.pdf