



RSE @ SUN Workshop

'The Internet of Things (the 'five senses of the Internet')

Dr Jannetta Steyn (Research Software Engineer, Newcastle University, UK)

27 & 28 September 2022 | 09h00 – 15h00 SAST daily

Library MakerSpace, Stellenbosch University

(This FREE in-person workshop is only open to those who have a Stellenbosch University Microsoft account. No knowledge of electronics, programming or the Internet of Things is expected)

ABSTRACT

You have probably heard of the Internet of Things (IoT), but you may wonder what it is about and how to apply it in your work. This hands-on workshop on IoT offers you an understanding of what it is, how things work, and the (many) possibilities for capturing and broadcasting data from a variety of specialist sensors. Sensors exist to capture temperature, humidity, light intensity, motion, pressure and chemical substances such as CO₂ and alcohol in real time. How could you use them to craft a novel tool for your research?

WHAT TO EXPECT

You may have heard Arduinos and other electronic devices (cellphones, wearables, etc) in the IoT context, but how do these things relate? You will be working with an Arduino-like device, simple sensors and a computer to discover how an IoT system can be assembled to capture data and make it available on the Internet. You will also be introduced to the basics of programming in the Arduino environment, get hands-on with wiring sensors into your device and stream your data to the Internet of Things.

VALUE

After this workshop, some of the fundamentals of IoT will be demystified, and you will be better able to imagine how to unlock the value of this technology in novel ways for your own research (on your own, or in collaboration with the Stellenbosch University IoT research group and RSE@SUN).

This workshop is provided in collaboration with:

Stellenbosch University Chair of Internet of Things, Stellenbosch University Library MakerSpace, UK Software Sustainability Institute (SSI), Society of Research Software Engineering (SocRSE), and National Institute of Theoretical and Computational Sciences (NITheCS).

[CLICK TO APPLY](#)

Or visit: <https://forms.office.com/r/nxYSUJb5fw>