

Data Science for Public Health workshop

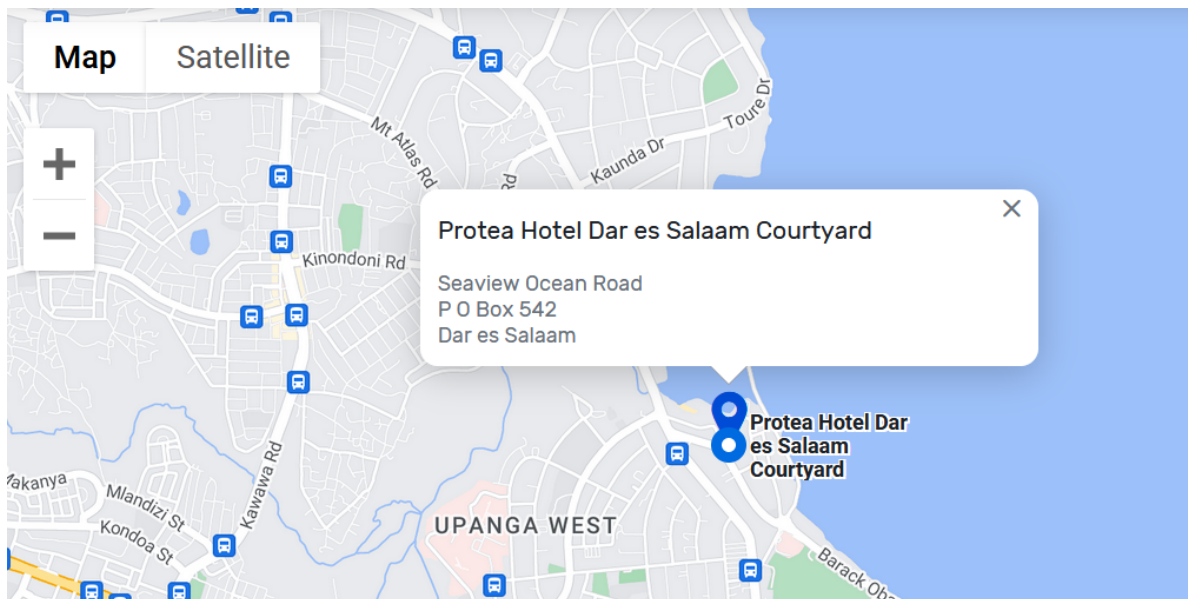
Information

September 26-28, 2022
09:00 - 17:00
Dar-es-Salaam, Tanzania

This workshop targets public health researchers and aims to accompany them in their journey towards Data Science. Looking forward to meeting you all on Monday!

1 Venue

Protea Hotel Dar es Salaam Courtyard on Seaview Ocean Road



2 Before the workshop

1. Fill out the online [pre-workshop questionnaire](#)
2. If you have not it yet, please go through the following five steps (about 30 minutes).
 - a. [Install R](#)
 - b. [Install and setup RStudio Desktop](#)
 - c. [Install Quarto](#)
 - d. [Install the rmarkdown R package](#)
 - e. [Create a GitHub account](#)
 - f. [Install GitHub Desktop](#)

Note

- All software used in this workshop are free.
- If you have any difficulties with the installation, support can be provided on the first day of the workshop before the first session or during breaks.

Important

For those who have already been introduced to Git, R/RStudio and RMarkdown, note that you need to additionally install Quarto for this workshop.

3 Schedule

3.1 Day 1: Monday September 26th

Table 2: Overview Day 1

Time	Session
08.30 - 09.00	Welcome
	Support for software installation
09.00 - 09.15	Introduction to data science tools
	Overview of objectives for Day 1
09.15 - 10.15	Version control with Git
10.15 - 10.45	☕ Break
10.45 - 11.45	Introduction to dynamic documents and Quarto
11.45 - 12.15	Use Quarto with Stata
12.15 - 13.15	☕ Lunch break
13.15 - 14.00	Import external data
14.00 - 15.00	Manipulate data
15.00 - 15.30	☕ Break
15.30 - 16.15	Visualise data
16.15 - 17.00	Share code and collaborate with Git

3.2 Day 2: Tuesday September 27th

Table 3: Overview Day 2

Time	Session
08.30 - 09.00	Welcome
09.00 - 09.20	Introduction to Data Science for Public Health Overview of objectives for Day 2
09.20 - 10.15	Discussion on concepts related to to public health data for decision-making
10.15 - 10.45	☕ Break
10:45-12:15	Malaria practical #1
12.15- 13.15	☕ Lunch break
13.15- 13.30	Prepare presentation of data findings
13.30 - 14.00	Present and discuss data findings
14.00 - 14.30	Interdisciplinary discussion on malaria, dataset, uncertainties, challenges
14.00 - 14.30	Malaria practical #2
15.00 - 15.30	☕ Break
15.30 - 16.15	Malaria practical #2
16.15 - 16.30	Prepare presentation of data findings
16.30 - 17.00	Present and discuss data findings

3.3 Day 3: Wednesday September 26th

Table 4: Overview Day 3

Time	Session
08.30 - 09.00	Welcome
09.00 - 09.20	Interdisciplinary introduction to big data and machine Learning Overview of objectives for Day 3
09.20 - 10.15	Discussion on secondary data sources (Public Datasets, e.g. DHS, Facebook, facilities, etc) Benefits and drawbacks between primary and secondary data sources
10.15 - 10.45	☕ Break
10.45 - 12.15	[Analysis stream] Introduction to machine learning [Interpretation stream] Critically discuss data surveys/reports
12:15-13:15	☕ Lunch break
13:15-13:45	Speed talks - research presentations
13:45-15.00	[Analysis stream] Data practical [Interpretation stream] Critically discuss data surveys/reports
15.00 - 15.30	☕ Break
15:30-16:00	Feedback on findings from practicals
16:00-16:30	Feedback on workshop - Wrap-up

4 After the workshop

1. Fill out the online post-workshop questionnaire (link to be provided after the workshop)