



# NAWIRITECH WANGARI MAATHAI SPRINT

20th May 2024 - 9th August 2024  
Mondays-Thursdays, 2pm-4pm UTC



[www.nawiritech.com](http://www.nawiritech.com)

# NawiriTech

**NawiriTech** is a data science training platform that aims to build data professionals for social impact. Our mission is to empower young Africans from non-computing and non-technical backgrounds with data and problem-solving skills to solve problems in their diverse professional fields such as health, climate change, education and much more.

The **Wangari Maathai Sprint** is a rigorous 12-week program that will cater for complete beginners in data science as well as working professionals who want to acquire data skills to be more effective in their workplaces. This sprint welcomes university students, recent graduates and young professionals with little or no data science knowledge.

**Why Wangari Maathai Sprint?** We name our programs after African scientists who are otherwise not as widely appreciated and use our programs to illuminate their contributions.

## Our Approach

Rather than focusing on purely technical tools, we recognize the interdisciplinary nature of data for social impact and combine technological understanding with the understanding of social sciences. Our curriculum aims to provide good intuition and understanding of Data for Social Impact while equipping our learners with hands-on technical training to solve problems in their respective fields. Our learners get to work on a project of their interest applying the data skills acquired during the program. In addition, they also get to interact with peers from other African countries, forming a close-knit community of collaborators and problem-solvers.

# Shaping Data Empowered Citizens for Africa



The NawiriTech Wangari Maathai sprint is structured from a beginner level. You will learn fundamental concepts from an introductory stand-point, building a solid foundation in understanding various techniques and methods used in data science projects. You will learn Python programming language in a beginner friendly manner, as well as core foundational data science concepts that will augment your understanding of problems in your field and work on suitable solutions. You will also get to interact with peers from different African countries through curated break-out rooms as you collaboratively work on solving problems.

After the fellowship, you will join a community of NawiriTech alumni with access to facilitators and mentors. You will also collaborate with your peers across the continent when exciting opportunities emerge. You will get access to project help-desks in which the facilitators help you with your data projects from work or school. We also share job and internship opportunities. Occasionally, you will gather physically with other alumni for retreats and networking.

# Team

During our programs, you will have the opportunity to interact closely with our team of facilitators who lead our sessions, and guest lecturers to discuss the applications of data science and technology. Our facilitators come from multiple African countries, with different academic backgrounds, and are trained by Equitech Futures. They work together to create a new way of teaching data science and programming to learners from any academic background.



**Clinton Manoti**

*Kenya*  
Economist



**Ofentse Rice**

*Botswana*  
Computer Scientist



**Apollinaire Abi**

*Togo*  
Mathematician



**Andrew Kimani**

*Kenya*  
Computer Scientist



**Nikita Kaushal**

*Guest Lecturer*  
PhD, University of  
Oxford



**Abhilash Mishra**

*Guest Lecturer*  
PhD, Caltech



**Thomas Murray**

*Guest Lecturer*  
MFA, Virginia Tech



**Bhasi Nair**

*Guest Lecturer*  
PhD, University of  
Cambridge

## Curriculum

Our curriculum is tailored to build strong foundations in python programming, statistics, problem-solving and research. While we introduce you to multiple concepts in data science, we also ensure that you develop a solid understanding and practice how to question, transform, explore and visualize data, and predict future outcomes. We also discuss machine learning and large language models, to understand the place of AI in the future of data science, and how we can efficiently use these tools. The strength of our curriculum also lies in our discussion-led approach to teaching, inviting ideas and argumentation from instructors and learners working in academic research, healthcare, education, engineering, art, architecture, management, and much more.

## Modules

**Data Science for Social Impact**

**Problem Solving and Programming**

One of our core modules covers statistics and research methods, while the other focuses on a problem-solving approach to python programming. Through case studies and projects, these two modules study concepts and practice them simultaneously. Our goal is to provide you with excellent training to apply data analysis, python programming and statistics skills to your field of work or interest.



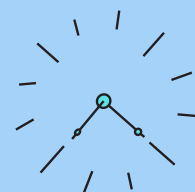
### Online Learning

Discussion-led sessions by our facilitators



### 12 Weeks

May - Aug. 2024, including a 5-day break during week 6



### 15 - 20 hours/week

Including lectures, discussions and assignments

## Data Science for Social Impact

Generating insight from data necessitates understanding how to think about data, and which rules the data follows. Assuming no prior knowledge of statistics, you will learn concepts from measuring the centre of data points, to developing and evaluating predictive models using statistics.

- 1 Summarizing data
- 2 Trends in data
- 3 Correlation & Causation
- 4 Hypothesis Formation
- 5 Linear Modelling
- 6 Introduction to ML

## Problem-solving & Python programming

We think of programming as a logical problem-solving process, and teach you to understand your code. During our sessions you will learn from detailed case studies, code with other learners, discuss the to use of tools like ChatGPT for programming, and practice preparing and presenting your findings.

- 1 Intro to programming
- 2 Data wrangling
- 3 Data visualization
- 4 Python Challenges
- 5 Large Language Models
- 6 Presenting findings

## Tuition and Financial Aid

The tuition for the program is **750 USD**.

**With generous support from Equitech Futures, all admitted learners will receive a \$250 scholarship. Additional financial support of up to \$100 will be awarded based on merit during the admission process.**

## Admissions

### ELIGIBILITY CRITERIA

The applicant must satisfy the following requirements:

- Be a citizen of an African country
- Be willing to commit 15-20 hrs a week in live and synchronous online sessions, from 2pm-4pm UTC on Mondays to Thursdays

We welcome applicants from all academic, professional, cultural, and socioeconomic backgrounds. No programming experience required

### QUALITIES WE LOOK FOR

- ✓ Passionate about solving societal challenges within the African continent
- ✓ Highly motivated about creating evidence-driven solutions

### SELECTION TIMELINE

Applicants must submit an online application from the NawiriTech website after which they will be invited for an assessment, followed by an interview with the team.

**Mar. 25, 2024**

Applications open

**Apr. 21, 2024**

Application deadline

**Apr. 27, 2024**

Online assessment

**Apr. 29, 2024**

Invitation for interview

**May 12, 2024**

Application decision

**May 20, 2024**

Program starts



Shaping Data Empowered  
Citizens For Africa

[admissions@nawiritech.com](mailto:admissions@nawiritech.com)



[www.nawiritech.com](http://www.nawiritech.com)