

## **NEMISA 4IR DATA SCIENCE HACKATHON**

### **19-21 NOVEMBER 2021**

NEMISA will be hosting a 4IR Digital Skills Hackathon between 19-21 November 2021 virtually and in three different physical locations in **North West (Mahikeng Digital Innovation Hub), Gauteng (NEMISA, Park town) and the Free State (CUT, Central University of Technology)**. Data science is the art and science of extracting meaning out of data. The art of data science is in the way that tools to extract meaning from data are used. The variety of usage represent the variety of focus, mandate and context and therefore reveals different answers.

### **THE MOTIVATIONS**

The theme of the hackathon in 2021 “**Democratizing Data Science and the Future of Work in the 4IR**” seeks to bring together government, academia, industry, organised labour and civil society to deliberate on how the 4IR and COVID have changed the value of digital skills, and how South Africa can better prepare for a changed world. For example, how fast are certain jobs going to be lost, what digital skills are needed to better participate in the changed world?

### **HACKATHON (DATA SCIENCE) QUESTIONS**

**Some of the questions that the hackathon will engage in include, but are not limited to:**

1. How susceptible are jobs in each sector or industry to digitization in the 4IR
2. How can an individual know how long their skills will remain valuable?
3. How can dynamic career pathways be created so that individuals (and groups) can begin the journey upskilling and re-skilling journey of life-long and life-wide (change of industry) learning?
4. With the few and very expensive data scientists, how can we allow domain experts to participate better in the data science movement?
5. How can we find efficient mechanisms to better share the limited resources that are available?
6. What case studies can we adopt for such efforts?
7. What are the new jobs in data science that will be required in that sector?

### **DATA SCIENCE MASTERCLASSES**

There will be a set of data science master classes to prepare some participants for the hackathon as follows – 15<sup>th</sup>-18<sup>th</sup> November 2021

### **THE DATA**

There are data sets that have been sourced in partnership with HSRC and SEDA. These data sets will be cleaned to remove any privacy information. A brief description which describes the data will also be made available on <https://www.nemisa.co.za>

### **REGISTER YOUR TEAM**

Click here to register a team to participate in the hackathon - <https://forms.gle/xRhd3uZfk63raf8eA>

### **PRIZES**

First prize: **R30,000** | Runner-up prize: **R20,000** | Second runner-up: **R10,000** | Special prize: **R150,000** towards the improvement of the winner solution