AIMS

African Institute for Mathematical Sciences
RWANDA

By virtue of the authority vested in it by the Higher Education Council and the Ministry of Education, Republic of Rwanda, AIMS Rwanda hereby confirms that

Samson Niyizurugero

07/07/1997, Rwanda

having fulfilled all the requirements is awarded a

Master of Science in Mathematical Sciences

With GOOD PASS

on 27th June 2023

Academic Director, AIMS Rwanda
Prof. Blaise TCHAPNDA

Center President, AIMS Rwanda
Prof. Dr. Sam Yala

AIMS
African Institute for Mathematical Sciences
RWANDA

TRANSCRIPT OF ACADEMIC RECORDS
Master of Science in Mathematical Sciences

Names: Samson NIYIZURUGERO
Reg No: AIMS222305051
Sex: M
Major: Data Science

Date of Birth: 07/07/1997
Place of Birth: Nyaruguru
Country: Rwanda
Award Date: 27th June 2023

SKILLS PHASE COURSES	GRADE
Ordinary Differential Equations	P
Programming with Python	P
Physical Problem Solving	P
Mathematical Problem Solving	P
Introduction to Probability and Statistics	P
Introduction to Computing and Latex	P

REVIEW PHASE COURSES	GRADE
Big Data Analytics with Python	G
Data Driven Optimization	P
High Performance Computing	V
Statistical Machine Learning	P
Database and Data Management	G
Statistical Regression	P
Numerical Linear Algebra	P
Introduction to Financial Mathematics	P
Data Assimilation	D
Introduction to Actuarial Mathematics	G
Probability Models	P

ESSAY PHASE	G
OVERALL GRADE	G

ADDITIONAL COURSE(S)	GRADE
Classical Mechanics	P

Prof Blaise Tchapnda
Academic Director, AIMS Rwanda

For more info about the African Institute for Mathematical Sciences (AIMS) Rwanda
www.aims.ac.rw | AIMS Global Network: www.nexteinstein.org| South Africa | Senegal | Ghana | Cameroon | Tanzania |
Rwanda |United Kingdom | Canada | Germany | Scandinavia

OVERVIEW OF DEGREE AWARD REQUIREMENTS AND EXPLANATION OF CODES USED

CONDITION OF AWARD

The minimum requirements to obtain the AIMS Rwanda degree in Mathematical Sciences are the successful completion of the Skills Phase, obtaining at least a Pass in 11 courses during the Review Phase, and successfully completing and defending a 10-week research project.
Additional courses might be undertaken by the student, but they do not count towards their final grade. These are indicated as such overleaf.

ASSESSMENT & GRADING SYSTEM

During the Skills Phase, course assessment is made of weekly assessments, with a high emphasis on group work and the evaluation of students' individual growth. For the Skills courses the grade breakdown is as follows:

* P - Pass (70%-100%)
* F - Fail (<70%)

Review course assessment is typically made up of weekly assignments, short quizzes and an extended quiz/exam at the end of the course. For Review courses, and for the research project, the grade breakdown is as follows:

* D - Distinction (85% and above)
* V - Very Good Pass (80% - <85%)
* G - Good Pass (70% - <80%)
* P - Pass (60% - <70%)
* F - Fail (<60%)

To obtain a Distinction as overall grade, a student needs a minimum of six Distinctions in the Review courses, and a Distinction for the essay. Similarly, to get a (Very) Good Pass as overall grade, a student is required to have obtained a minimum of six (Very) Good Passes -or above- in the Review courses, and a (Very) Good Pass -or above- for the essay.

In extraordinary cases, for instance where the student essay is exceptional, the overall grade might be adjusted upwards. This decision is made by the Jury, chaired by the Academic Director.

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Rwanda |United Kingdom | Canada | Germany | Scandinavia

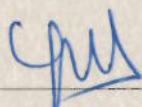# CERTIFICATE *of* PARTICIPATION

This is to certify that

Sampson Niyizurugero

Attended the course

Geospatial Analytics using R and R-INLA

held at the African Institute for Mathematical Sciences Research and Innovation Centre in Kigali, Rwanda from 27 November to 01 December 2023.

Dr. Paterne Gahungu

AIMS Research and Innovation

Prof. Marta Blangiardo

Imperial College London

Imperial College London

MACHINE LEARNING & GLOBAL HEALTH NETWORK

AIMS | African Institute for Mathematical Sciences RESEARCH & INNOVATION

CERTIFICATE OF PARTICIPATION

IN A COURSE ON

MODERN STATISTICS AND MACHINE LEARNING FOR GLOBAL HEALTH

This is to certify that

Samson Niyizurugero

has actively participated in this short course organized by the African Institute for Mathematical Sciences Research and Innovation Centre and Imperial College London from February 22 to 24, 2024, in Rwanda

Dr Alexandra Blenkinsop
Research Associate in Mathematics
Imperial College London

Prof. Wilfred Ndifon
Centre President
AIMS Research & Innovation Centre

ICDL

The Digital Skills Standard

ICDL Profile Certificate

Samson NIYIZURUGERO

Candidate Name

RW10003150

Candidate No.

has successfully completed the following modules:

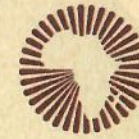| Module Name	Version/Syllabus	Date
Data Analytics	MS Office 2016 / 1.0	12/06/2024

Solange Umulisa, General Manager ICDL Africa

12/06/2024

Date

AIMS | African Institute for Mathematical Sciences **RESEARCH & INNOVATION**

CERTIFICATE OF PARTICIPATION

This is to certify that

Samson Niyizurugero

has actively participated in the **Building Your Own Chatbot Workshop** organized by the AIMS Research and Innovation Centre from 13th to 17th January 2025.

Topics covered: Identifying/Creating Conversation Datasets | Experimentation, Evaluation, and Testing | Retrieval-Augmented Generation (RAG) | Fine-tuning LLMs | Model Deployment

Dr. Sultan Hassan
NASA Hubble Fellow
New York University

Prof. Cecil Ouma
Academic Manager
AIMS Research & Innovation Centre

Certificate of Completion

This certificate hereby certifies that

Samson Niyizurugero

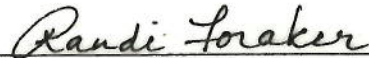*has successfully completed the requirements for the*

Opportunities for Healthcare Research by use of Synthetic Data Workshop
3rd Annual DS-I Africa Consortium Meeting Kigali, Rwanda
November 5, 2023

Philip R.O. Payne, PhD
Director, Institute for Informatics,
Data Science and Biostatistics (I²DB)

Randi Foraker, PhD, MA
Director, Center for Population
Health Informatics

David K. Tumusiime, PhD
Deputy Director, Regional Centre of Excellence in
Biomedical Engineering and eHealth

Washington University in St.Louis
SCHOOL OF MEDICINE

DS-I Africa
Data Science for Health Discovery
and Innovation in Africa

UNIVERSITY of RWANDA

AIMS
African Institute for
Mathematical Sciences
RWANDA

NIH National Institutes of Health
Office of Strategic Coordination–The Common Fund

Certificate of Participation

This certificate is awarded to

NIYIZIRUGERO Samson

For participating in the African Mathematical School and Conference held at INES-Ruhengeri in Musanze – Rwanda from 18th to 29th June 2023.

Dr. Charline UWILINGIYIMANA
Head of SAE and Chair of AMS & Conference

Fr. Dr. Jean Bosco BARIBESHYA
Vice - Chancellor of INES-Ruhengeri

Sustainable Stock Exchanges Initiative

IFC | **International Finance Corporation** — WORLD BANK GROUP

Creating Markets, Creating Opportunities

Certificate of Participation

Samson NIYIZURUGERO

Participated in

Gender Equality and Global Markets

In strategic collaboration with:

UN WOMEN

COLUMBIA | SIPA
School of International and Public Affairs

Sustainable Investing Research Initiative

CPD CERTIFIED
The CPD Certification Service

Date issued: 10 October 2024

4 CPD Credits

AIMS | African Institute for Mathematical Sciences | RESEARCH & INNOVATION

CERTIFICATE OF PARTICIPATION

This is to certify that

Samson NIYIYIZURUGERO

has activey participated in the **Deep Learning for Wildlife Monitoring Workshop** organized by the AIMS Research and Innovation Centre from February 24 to 26, 2025.

Topics covered: Introduction to Wildlife Monitoring and Bioacoustics | Deep Learning for Bioacoustics | Introduction to Biologging

Dr. Lorène Jeantet
Postdoctoral Fellow
AIMS Research and Innovation centre

Prof. Cecil Ouma
Academic Manager
AIMS Research & Innovation Centre

AIMS

African Institute for
Mathematical Sciences
IN AFRICA'S YOUTH,
THE FUTURE OF SCIENCE

Certificate

OF PARTICIPATION

This is to certify that

Samson Niyizurugero

has actively participated in **the Optimization, Optimal and Predictive Control: Foundations and Applications Workshop**, organized by the AIMS Research and Innovation Centre and AIMS Rwanda, held from May 19th to 30th, 2025

Dr. D.Sc. Abebe Geletu W. Sleassie
German Research Chair (Applied Mathematics and AI)
AIMS Rwanda

Prof. Cecil Ouma
Academic Manager
AIMS Research & Innovation Centre

CNRS

GDR RIFT

In partnership with

RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT

kenet
Kenya Education Network

UNIVERSITY OF NAIROBI

This is to certify that

Samson Niyizurugero

——————————————————————————————

attended the

East-African School for Young Researchers on Advanced Machine Learning Techniques (EASY-ML)

University of Nairobi, Kenya
9-22 July 2025

Dr Lydia Roos
CNRS & Sorbonne Université,
Organiser

Dr Dimitris Varouchas
CNRS & Université Paris-Saclay,
Organiser

Dr Ian Kaniu
University of Nairobi,
Organiser

Prof Francis Nyongesa
University of Nairobi,
Organiser