



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

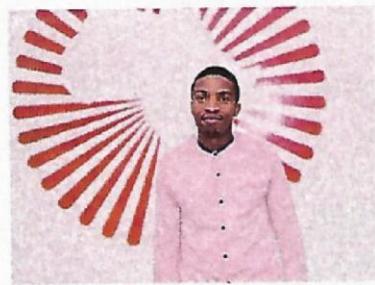
Academic Director, AIMS Rwanda
Prof. Blaise TCHAPNDA



Center President, AIMS Rwanda
Prof. Dr. Sam Yala



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)

Classical Mechanics

Prof Blaise Tchapnda

Academic Director, AIMS Rwanda

GRADE

P



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.

CERTIFICATE *of* PARTICIPATION

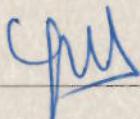
This is to certify that

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

CERTIFICATE OF PARTICIPATION

IN A COURSE ON

MODERN STATISTICS AND MACHINE LEARNING FOR GLOBAL HEALTH

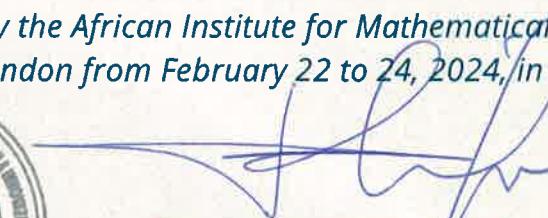
This is to certify that

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



The Digital Skills Standard

ICDL Africa

ICDL Profile Certificate

Samson NIYIZURUGERO

Candidate Name

RW10003150

Candidate No.

has successfully completed the following modules:

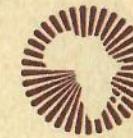
Module Name	Version/Syllabus	Date
Data Analytics	MS Office 2016 / 1.0	12/06/2024

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

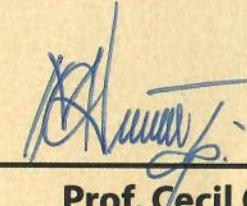
Samson Niyizurugero

.....
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



African Institute for
Mathematical Sciences
RWANDA



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.

Charline

Bosco

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



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





Certificate of Participation

SAMSON NIYIZURUGERO

Participated in

Gender Equality and Global Markets

In strategic collaboration with:



COLUMBIA | SIPA
School of International and Public Affairs

Sustainable Investing Research Initiative



CERTIFICATE OF PARTICIPATION

This is to certify that

Samson NIYIYIZURUGERO

has actively 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

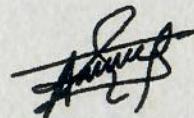
Certificate

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



In partnership with



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

Certificate in Business Management

This is to certify that

Mr Samson Niyizurugero

Class of 2023

has successfully completed all requisite courses in business management offered by the European School of Management and Technology Berlin in collaboration with the African Institute for Mathematical Sciences, Harvard Business Publishing and the University of Victoria in Canada.



Dr David Sena Attipoe
Managing Director
iiAfrica

4 August 2023



Professor Wulff Plinke
Founding Dean ESMT Berlin



Apple Authorised Training
Certificate of Achievement

Samson Niyizurugero

has successfully completed

App Development with Swift

Issued on

10th September 2025



CERTIFICATE OF RECOGNITION

Awarded to

Samson Niyizurugero

in recognition of your abstract **poster presentations** at the **2nd African Conference On Machine Learning, Optimization & Applications**, held on September 22-24, 2025 in Kigali, Rwanda. Your research has enriched the exchange of knowledge and inspired meaningful discussions among peers.

A handwritten signature in blue ink, appearing to read 'Abebe Geletu'.

Dr. rer. nat. habil. Abebe Geletu

German Research Chair,
AIMS Rwanda

A handwritten signature in blue ink, appearing to read 'Pu Li'.

Prof. Pu Li

German Research Partner,
TU Ilmenau