

Emmanuel NYANDU KAGARABI

Curriculum Vitae

Personal Information

Firstname *Emmanuel*
Familyname NYANDU KAGARABI
Gender Male
Nationality Democratic Republic of Congo (DRC)
Address 6 Melrose Road, Muizenberg, 7945 Cape Town, South Africa
Mobile +27 79 134 8250/+243 971 319 133
Email emmanuelnk@aims.ac.za, emmanuelnyandukagarabi@gmail.com
Linkedin [Emmanuel NYANDU KAGARABI](#)
Github [emmanuelnyandukagarabi](#)

Education

January - November 2024 **Master of Science in Artificial Intelligence for Science**, *African Institute for Mathematical Sciences (AIMS)*, Cape Town, South Africa.
The program sits at the exciting intersection of AI and the Sciences : Machine Learning, Computer Vision, Deep Learning for Ecology, Natural Language Processing, Reinforcement Learning. Find all courses [here](#).
You can find some of my presentations related to this exciting Master's program [here](#).
2016 - 2021 **Bachelor of Mathematics**, *Institut Supérieur Pédagogique de Bukavu (ISP-BUKAVU)*, Bukavu, DRC.
This is a 5-year program offering solid training in pure and applied mathematics, including Algebra, Analysis, Geometry, Operational Research, Numerical Calculation, General Topology, Mathematical Logic, etc.
Thesis: [Treatment of numerical tensors](#).
2011 - 2016 **High School Education**, *Institut Nyamokola*, Birava, South-Kivu province, DRC.
This is a 6-year program where I received a solid formation and developed my interest in Mathematical and physical sciences and how to teach them to others.

Experience

September 2022- December 2023 **Part-time Assistant**, *Universite officielle de Bukavu(UOB-BUKAVU)*, Bukavu.
During this time, I have been teaching practical work in [Algebra](#), [Analytical Geometry](#) to first-year students at Ecole des Mines Faculty, and [General Mathematics](#) (Algebra and Analysis) to first-year students of the Faculty of Applied Sciences (Geology, Biology, Environment, and Agronomy).
October 2022- December 2023 **Visiting Lecturer**, *Institut Supérieur d'Etudes Commerciales et Financières de Bukavu*, Bukavu.
I have been teaching [General Mathematics](#) course to first-year students of all faculties: Financial management, Business management, Management and administration, and Computer sciences.
April-June 2022 **Visiting Lecturer**, *Institut Supérieur Pédagogique de Bukavu (ISP-BUKAVU)*, Bukavu.
I have been teaching [Mathematics for Chemists II](#) course to third-year students of the Chemistry-Physics department.
October 2021- December 2023 **Teacher**, *MAENDELEO School Group Institute*, Bukavu.
I taught mathematics and physics to pupils in the Commercial Management, Social Sciences and General Pedagogy sections.
December 2020-January 2021 **Trainee**, *Societe Nationale d'Electricite (SNEL)*, Bukavu.
During this internship, I gained and applied knowledge about the operation of a hydroelectric power plant in general and specifically about the Ruzizi 1 plant where I was assigned.
December 2020-January 2021 **Trainee**, *Unité de Recherche et Enseignement de Mathématiques Appliquées(UREMA)*, ISP-Bukavu.
During this internship, I acquired and applied knowledge relating to the operation of a scientific research unit in general, and teaching and research in pure and applied mathematics in particular.

Languages

French	Fluent	<i>I communicate proficiently and engage in complex discussions, with a deep understanding of cultural nuances and idiomatic expressions.</i>
English	Proficient (CEFR B2)	<i>I comfortably converse, read, and write, with a good grasp of grammar and vocabulary suitable for my academic field.</i>
Kiswahili	Native Speaker	<i>I fluently speak, read, and write, with a deep understanding of cultural nuances and idiomatic expressions.</i>

Skills

\LaTeX	I have a solid ability to write complex text, equations, and draw certain figures.
Programming languages	I am sufficiently proficient in using Python and R.
Artificial Intelligence	I have sufficient knowledge to build/train Artificial Neural Networks in any AI sub-field, with or without any fancy library, depending on the problem.
Teaching	I feel extremely comfortable teaching applied as well as pure mathematics.

Volunteer Experience

17-22 March 2024	Volunteer , <i>African Institute of Mathematical Sciences (AIMS)</i> , Cape Town, South Africa. I had the privilege of volunteering during the SIYAKHULA (Growing Mathematics in Africa) festival, which celebrated the 20th anniversary of the African Institute of Mathematical Sciences network. Certificate .
------------------	---

Workshops

17-19 April 2024	Africa Scientifique Programme . This was a capacity-building program for African researchers, academics, and science communicators held at AIMS SOUTH AFRICA. Certificate .
10-29 June 2024	Meaningful Modeling of Epidemiological Data (MMED) 2024 . This is an intense introduction to data-driven infectious disease modeling, with participants coming in from across Africa and around the world held at AIMS SOUTH AFRICA.

Awards

April 24th, 2021	Bourse d'Excellence Cimpunda (BEC) . I received this scholarship which rewards the best students in BUKAVU town.
January-December 2024	Google DeepMind Scholarship . I received this scholarship fully funded by Google DeepMind to reward the top forty African students to study the Artificial Intelligence Masters program at AIMS SOUTH AFRICA.

References

- **Ulrich Paquet**, *Administrative Director of AIMS SOUTH AFRICA*.
Mail: ulrich@aims.ac.za
- **Claire David**, *Academic Director of the AI for Science Masters program at AIMS SOUTH AFRICA*.
Mail: claired@aims.ac.za
- **Buhendwa Nyenyezi**, *PhD in Numerical Optimization at the University of Namur/Belgium, Head of the Exact Sciences Section and Associate Professor in the Mathematics-Physics Department at ISP-BUKAVU*.
Contacts: +243 975 589 099/851 216 456, justinnyenyezi@gmail.com
- **Muya Kasanda**, *PhD in Astrophysics at the University of Durban and Director of the Faculty ÉCOLE DES MINES at UOB-BUKAVU*.
Contacts: +243 825 595 081, simon.muya.kasanda@gmail.com
- **Zihindula Biguru**, *PhD in Differential Geometry at the University of Kinshasa (UNIKIN) and lecturer at the UOB-BUKAVU and at the Catholic University of Bukavu (UCB BUKAVU)*.
Contacts: +243 823 049 302, zihindulabig@gmail.com

I solemnly declare upon my honor that these data are accurate and up to date.

CAPE TOWN, June 16, 2024
Emmanuel NYANDU KAGARABI