

MBANGULA AMUGONGO

ABOUT ME

Lameck Mbangula Amugongo holds a PhD from the University of Manchester, for his PhD he applied image-based data mining and artificial intelligence techniques to personalise treatment for lung cancer patients. He has a keen interest in quantitative research methods and their application to building responsible technology that solves societal problems. Moreover, Lameck is passionate about data science, technology policy and building ethical technology tools that make life easier for everyone.

EXPERIENCE

10/2023 – Present

Statistical ML in Clinical Development (Post Doc), Boehringer Ingelheim, Biberach, Germany.

- Identify, implement and evaluate innovative ML methods.
- Areas: multivariate statistical prediction models, Explainable AI and deep learning methodologies.
- Supervise students on subtopics related statistical ML.

09/2022 – 08/2023

Associate Researcher, Institute of Ethics in Artificial Intelligence (Technische Universität München), Munich, Bavaria, Germany. Working on an exciting project: MELISSA - mobile artificial intelligence solution for diabetes adaptive care.

- Investigating the ethical aspects related to trustworthy AI.
- Interdisciplinary research in ethics in artificial intelligence.
- Comprehensively address a growing group of ethical challenges arising at the interface of technology and human values.

07/2021 – 09/2023

Lecturer, Namibia University of Science & Technology, Windhoek Namibia

- Prepare and conduct lectures on artificial intelligence, data science and programming.
- Prepare student assessments, e.g. tests, projects and exams.
- Supervise student projects and conduct research.

04/2018 – 06/2021

PhD Student, University of Manchester, UK

Develop methods to describe, understand and predict lung tumour changes during RT using CBCTs.

- Create data pipelines and workflows.
- Develop a technique to investigate intensity changes across tumour-lung boundary.
- Develop a method to distinguish modes of tumour regression to determine the safety of RT adaptation.
- Develop models to proactively inform patients who will benefit from RT adaptation in lung cancer patients.

04/2014 – 01/2018

BI Analyst, Telecom Namibia, Windhoek Namibia

- Develop APEX application interfacing with Oracle databases.
- Perform data analysis on GSM trends.
- Develop an interface between various systems.
- Maintain business intelligence tools, databases, dashboards, systems, or methods.
- Manage timely flow of business intelligence information to users.



CONTACT ME

+4915753936480 /

+264852473265

amugongol@gmail.com

LinkedIn: [Mbangula](#)

GitHub: [Mbangula](#)

ORCID: 0000-0001-6468-2643

LANGUAGES

- **ENGLISH** – Expert.
- **OSHIWAMBO** – Mother tongue.
- **AFRIKAANS** - Intermediate.
- **GERMAN** – Advance beginner.

SKILLS

PROGRAMMING:

- Python, MATLAB, C, Java, Android, C#, SQL, PL SQL, HTML.

DATABASE

- SQL Server, Oracle 9i/10/11g/12c, MySQL and Firebase.

STATISTICAL TOOLS

- R

SOFT-SKILLS

- Interpersonal skills, analytical skills and leadership.

HONORS & AWARDS

- National Commission of Research Science & Technology (NCRST) Youth Innovator (2015)
- Best Master's student in Computer Science (2017).
- Mandela Washington Fellow (MWF) 2017.
- 5th Heidelberg Laureate Forum (Young Researcher) 2017.
- DARA Big Data PhD Scholarship 2018 – 2021.

REFERENCES

- 1. Dr Eliana Vasquez Osorio**
Senior Research Fellow
University of Manchester
Email: eliana.vasquezosorio@manchester.ac.uk
- 2. Dr Caitlin Corrigan**
Executive Directors
Institute for Ethics in Artificial Intelligence, Technical University Munich
Email: c.corrigan@tum.de
- 3. Dr Alan McWilliam**
Honorary Senior Lecturer
University of Manchester
Email: alan.mcwilliam@manchester.ac.uk

CONSULTANCY

04/2016 – 04/2016

Consultant/Trainer, UNESCO Youth mobile training, Windhoek

- Equip 27 trainers with the technical and pedagogical skills to train young Namibians in mobile applications development.
- Training included: Object Oriented programming, Android development and app monetisation.

04/2018 – 06/2018

Lead country researcher (Namibia): Africa Open Data

Barometer, Local Deployment Research Institute (LDRI), Nairobi, Kenya

- Complete and/or update a number of questions on readiness, use and impacts of open data on the basis of desk research and interviews;
- Assess the availability of data through a number of checkpoints across selected categories;
- Provide quality brief justifications in English for each answer and detailed source information, along with a score and associated evidence to support that score;

EDUCATION

- Doctor of Philosophy in Cancer Science, University of Manchester. **2018 – 2021**
- Master of Computer Science, Namibia University of Science & Technology (NUST). **2015 - 2017**
- Bachelor computer science (Honours): Software Development, Polytechnic of Namibia. **2014 - 2014**
- Bachelor of Information Technology in Software Engineering, Polytechnic of Namibia. **2010 - 2013**

SELECTED PUBLICATIONS

- Operationalising AI ethics through the agile software development lifecycle: a case study of AI-enabled mobile health applications. <https://doi.org/10.1007/s43681-023-00331-3> (2023).
- Invigorating Ubuntu Ethics in AI for healthcare: Enabling equitable care, <https://doi.org/10.1145/3593013.3594024> (2023).
- Mobile Computer Vision-Based Applications for Food Recognition and Volume and Calorific Estimation: A Systematic Review, <https://doi.org/10.3390/healthcare11010059> (2023).
- Identification of modes of tumour regression in NSCLC patients during radiotherapy, <https://doi.org/10.1002/mp.15320> (2022).
- Early prediction of tumour-response to radiotherapy in NSCLC patients, <https://iopscience.iop.org/article/10.1088/1361-6560/ac2f88> (2021).
- Identification of patterns of tumour change measured on CBCT images in NSCLC patients during radiotherapy, 10.1088/1361-6560/aba7d3 (2020).
- Understanding What Africans Say, 10.1145/3170427.3180301 (2018).
- Open Data Portal, a Technical Enabler to drive Innovation in Namibia, 10.1109/OBD.2016.19 (2016).
- Leveraging on open data to solve city challenges: A case study of Windhoek municipality, 10.1109/ICBDSC.2016.7460355 (2016).