

FELERMINO ALI

A Data Scientist & AI enthusiast willing to work on real-problem for African communities

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EXPERIENCE

Founder

MUSAINTELLECT, SU, LDA

Sep 2022 – Ongoing

Mozambique

- Administration
- Project Management: Lacuna Data Collection, Municipality Management Software

Consultant - Software Engineer

Cedsif, IT

Jul 2021

Maputo, Mozambique

- Center for the Development of Finance Information Systems (CEDSIF) - CEDSIF is an institution linked to the Ministry of Economy and Finance which was set up to modernize the public finance management information systems for all state and municipal bodies
- Full stack developer for Government Municipality Management System.

Consultant - Moodle Integration - Developer

Mwetana

Jan 2020 - Jun 2021

Remote - Monrovia, Liberia

- Integrate Moodle Learning Management System with SchoolLink™ SchoolManagement System (<http://moodle.schoolinkcx.com/>)

Consultant - Library Management System Iris University

IRIS UNIVERSITY

Jun 2020

Pemba, Mozambique

- Deployment of Iris University library management system
- <http://koha.universidadeiris.com/>
- Training

Consultant - eLearning Training

INSTITUTO DE SAÚDE DE PEMBA

2020

Pemba, Mozambique

- Students and Instructors Training on Moodle e-learning Platform

Consultant - Moodle Installation and Training

Unirovuma University

2021

Nampula, Mozambique

- Students and Instructors Training on Moodle Platform

HONOR AWARDS



Valedictorian

Given at graduation ceremony by the former President of Mozambique (His Excellency Mr Armando Emilio Guebuza)



FCT PhD scholarships

shortlisted as first place at "Consórcio de escolas de engenharias" of Science and Technology Foundation - PhD scholarships

SKILLS

Hard-working

Eye for detail

Motivator & Leader

C++

Python

R

NLP

Data Science

Artificial Intelligence

Statistical Analysis

LANGUAGES

Portuguese



English



Emakhuwa



EDUCATION

Ph.D. in Informatics Engineering

Faculty of Engineering of the University of Porto

Sept 2021 – ongoing Porto, Portugal

Thesis title: Machine Translation for Emakhuwa, an Extremely Low-resource Bantu Language

M.Sc. in Information Technology

SEGi University

Sept 2014 – June 2016 Malaysia, Kuala Lumpur

B.Sc. in Computer Engineering

Lurio University

Sept 2008 – June 2010

Faculty Member, AI Researcher and Software Developer

Lurio University

📍 Pemba, Mozambique

- Assistant Lecturer of the following subjects: Object Oriented Programming, Database Lab
 - Developer of E-Sira (seul.unilurio.ac.mz)
 - Research
-

Research Assistant

Research Assistant

📍 SEGi, Malaysia

- Assistant Lecturer of the following subjects: Object Oriented Programming, Database Lab
- Developer of E-Sira (seul.unilurio.ac.mz)
- Research

PROJECTS

Emakhuwa Machine Translation Dataset Collection

Lacuna Fund/Meridian Institute

📅 2 yrs

- Awarded a grant to create the first large-scale dataset for Machine Translation of the Emakhuwa language, Mozambique's widely spoken indigenous language.
 - <https://lacunafund.org/2021-african-language-awardees/>
-

Google exploreCSR

Google

📅 1 yr

Developed a proposal to promote computing research among underprivileged students in the North of Mozambique. The project focused on boosting self-efficacy, fostering belonging, providing practical skills in Computer Sciences, and encouraging graduate studies.

<https://research.google/outreach/explore-csr/recipients/>

PUBLICATIONS

Journal Articles

- F. D. M. A. Ali, A. Caines, and J. L. A. Malavi, "Towards a parallel corpus of portuguese and the bantu language emakhuwa of mozambique," 2021. arXiv: 2104.05753 [cs.CL].

Conference Proceedings

- F. M. E. Manuel, S. M. Saide, F. D. M. A. Ali, and S. Lotfi, "Ocular cataract identification using deep convolutional neural networks," in *2023 International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems (icABCD)*, 2023, pp. 1–5. DOI: 10.1109/icABCD59051.2023.10220532.
- S. Muhammad, I. Abdulmumin, A. Ayele, et al., "AfriSenti: A Twitter sentiment analysis benchmark for African languages," in *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*, H. Bouamor, J. Pino, and K. Bali, Eds., Singapore: Association for Computational Linguistics, Dec. 2023, pp. 13 968–13 981. DOI: 10.18653/v1/2023.emnlp-main.862.
- E. Á. Cardoso, F. D. M. A. Ali, and S. M. Saide, "Snake species identification using deep convolutional neural networks," in *2022 IEEE 13th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, 2022, pp. 0202–0209. DOI: 10.1109/IEMCON56893.2022.9946504.
- F. D. M. A. Ali, E. Gimo, and S. M. Saide, "A minimax agent for playing ntxuva game – the mozambican variant of mancala," in *2020 International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems (icABCD)*, 2020, pp. 1–5. DOI: 10.1109/icABCD49160.2020.9183848.
- B. J. Fonseca, A. Felermino D. M. A., and S. M. Saide, "A deep convolutional neural network for classifying waste containers as full or not full," in *2019 IEEE International Smart Cities Conference (ISC2)*, 2019, pp. 54–59. DOI: 10.1109/ISC246665.2019.9071746.