# African Artificial Intelligence Lab (AfriAI Lab)

The University of Dodoma (UDOM) and the Nelson Mandela African Institution of Science and Technology (NM-AIST)

**Website:** http://afriailab.udom.ac.tz

# Call for Applications: PhD Scholarships

**Application deadline: Friday, 4 December 2026, 23:59 East Africa Time**

## Preamble

The AfriAI Lab invites applications for **three (3) partial PhD scholarships** for doctoral research in Artificial Intelligence at UDOM or NM-AIST.

The Lab is a consortium of the University of Dodoma (UDOM) and the Nelson Mandela African Institution of Science and Technology (NM-AIST). The lab focuses on moving AI solutions from prototype to real-world use, building advanced research capacity, and widening inclusion. The scholarships will develop researchers in emerging areas of AI: low-resource languages, agentic AI, and edge AI - applied to healthcare, agriculture, and education.

The Lab is committed to Gender Equality, Disability and Inclusion (GEDI). **Women and persons with disabilities are strongly encouraged to apply.** Applicants with disabilities who wish to be considered for the scholarship should say so in their motivation letter. This information will be treated confidentially, and supporting documentation may be requested only at award stage.

## Research Focus Areas

Each proposed PhD project must combine **one technology track** with **one application domain**. Scholars will develop their research ideas with AfriAI Lab researchers and their university supervisors.

| Technology track | Example topics |
|---|---|
| Low-resource languages | Kiswahili and other African-language NLP and speech; dataset creation and annotation; translation and voice interfaces |
| Agentic AI | LLM-based agents for decision support; retrieval-augmented generation; tool use; evaluation and safety of agents |
| Edge AI | On-device and offline models; model compression and quantization; TinyML; AI with IoT and sensors in low-connectivity settings |

**Application domains:** healthcare, agriculture, or education.

Proposals that build on the Lab's existing healthcare and agriculture use cases, or support AI in Tanzania's education reforms, are especially welcome.

## Scholarship Value and Benefits

Each scholar receives a partial scholarship of up to **TZS 25,000,000** for the research component of their PhD, available until the project ends in August 2029.

| Item | Amount (TZS) | Covers |
|---|---|---|
| Books and stationery | 2,000,000 | Books, stationery and study materials |
| Research fund | 23,000,000 | Field data collection, research travel, publication charges, dissertation production |
| **Total per scholar** | **25,000,000** | |

Funds are released against an approved research plan and progress milestones. **The scholarship does not cover tuition fees or living allowances**; applicants must confirm how these will be met.

Scholars will also benefit from:

- Co-supervision and mentorship by AfriAI Lab researchers at UDOM and NM-AIST
- Access to the Lab's GPU computing (NVIDIA A30 and A6000) and research data storage
- Mentorship from industry experts and links to the Lab's government and industry partners
- Opportunities to present at Lab workshops, seminars and the AfriAI Lab international conference

## Eligibility

To be eligible, an applicant must:

1. Be admitted to, or registered in, a **full-time PhD program at UDOM or NM-AIST**. Both of the following are eligible:
   (a) Newly admitted students for the 2026/2027 academic year (admission letter required).
   (b) Registered PhD students in their first or second year of study (proof of registration required).
2. Hold an MSc degree in Artificial Intelligence, Machine Learning, Data Science, Computer Science, Software Engineering, Computer Engineering, ICT, Electronics and Telecommunications, Bioinformatics, Agricultural Informatics, Health Informatics, Educational Technology, Computational Linguistics, or a related field, with a minimum GPA of 4.0/5.0 or its equivalent.
3. Propose research that combines one technology track with one application domain listed above, in a concept note of no more than two pages.
4. Be able to complete the funded research activities by August 2029.
5. Not hold another scholarship that covers the same research costs.

The following are added advantages:

- Publications in peer-reviewed journals or conferences
- A track record of hands-on, multidisciplinary research or software development
- Willingness to seek additional funding and grants through the Lab

## Desirable Skills

All applicants should show knowledge and experience in most of the following:

- Programming in Python, and familiarity with at least one of R, C/C++, Java or JavaScript
- Building and evaluating machine learning models with toolkits such as PyTorch, TensorFlow, Hugging Face or scikit-learn
- Software engineering practice: version control (Git), containers (Docker) and reproducible experiments
- Quantitative and qualitative research methods, experimental design, and analysis of data from multiple sources
- Responsible AI: bias, fairness, privacy and data protection

Track-specific experience is an advantage:

| Track | Relevant experience |
|---|---|
| Low-resource languages | NLP or speech processing; transformer models; building and annotating text or speech datasets |
| Agentic AI | Large language models; retrieval-augmented generation; agent frameworks; LLM evaluation |
| Edge AI | Embedded systems or IoT; model compression and quantisation; TensorFlow Lite, ONNX or similar runtimes |

## How to Apply

Send your application as **one PDF file** to **goodiel.moshi@udom.ac.tz** by **Friday, 4 December 2026 at 23:59 East Africa Time**. Late or incomplete applications will not be considered.

- Name the file with your full name, e.g. *FULLNAME_AfriAI_PhD_2026.pdf*
- Use the email subject: *AfriAI Lab PhD Scholarship – [Track] – [Full Name]*
- Keep the PDF under 10 MB

The PDF must contain, in this order:

1. **Motivation letter** (one page): your research interest, chosen track and domain, how tuition and living costs will be met, and, if applicable, your request to be considered as an applicant with a disability.
2. **Research concept note** (maximum two pages): problem, objectives, methodology, data sources, expected outputs, and a timeline that ends by August 2029.
3. **Curriculum vitae** (maximum three pages), with two referees.
4. **Admission letter or proof of PhD registration** from UDOM or NM-AIST.
5. **Certified copies of MSc and BSc certificates and transcripts.**
6. **Supervisor support letter** from your appointed or proposed PhD supervisor, if available.
7. **Up to two publications**, if any, as full papers or links.

## Selection Process

A panel of AfriAI Lab researchers from UDOM and NM-AIST will screen eligible applications, score them against the criteria below, and interview shortlisted applicants (online or in person).

| Criterion | Weight |
|---|---|
| Quality, originality and feasibility of the concept note | 35% |
| Fit with the technology tracks, application domains and Lab objectives | 20% |
| Academic record | 20% |
| Technical skills and research experience, including publications | 15% |
| Motivation and commitment to Lab activities | 10% |

Final awards consider the interview, consideration for a person with a disability, and gender balance.

| Date | Step |
|---|---|
| 4 December 2026 | Application deadline |
| 18 December 2026 | Shortlisted applicants notified |
| 15 January 2027 | Interviews completed |
| 29 January 2027 | Awards announced; scholarship agreements signed |

Only shortlisted applicants will be contacted.

## Obligations of Scholars

Scholars will sign a scholarship agreement and will be expected to:

- Affiliate with the AfriAI Lab and take part in its research groups, seminars, workshops and outreach
- Submit a research plan at the start, and a progress report every semester
- Publish at least one paper in a peer-reviewed journal or conference, acknowledging the AfriAI Lab and IDRC
- Share datasets, code and publications openly where ethics and data protection allow
- Follow research ethics requirements and the Personal Data Protection Act, 2022
- Notify the Lab promptly of any change in study status

## Contacts

For enquiries, contact:

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