

Kassahun Azezew Ayidagn

AI Researcher & Assistant Professor

📍 Awi, Amhara, Ethiopia

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Dedicated AI researcher and academic with 9+ years of experience specializing in federated learning, multimodal AI, and privacy-preserving machine learning. Proven track record with 16+ publications and leadership roles in academic institutions. Seeking to advance research in scalable AI systems and decentralized learning methodologies.

🎓 Education

MSc in Computer Science and Engineering

📅 Symbiosis International University, India | 2016-2018

Thesis: "Filter based Feature Selection and Ensemble of Classifier for High Dimensional data: Comparative Study"

BSc in Computer Science

📅 Jigjiga University, Ethiopia | 2010-2014

👛 Professional Experience

Assistant Professor, Computer Science and Engineering

📅 Injibara University, Ethiopia | 2024-Present

Library Service Executive Director

📅 Injibara University, Ethiopia | 2024-Present

- ▶ Led the modernization and digital transformation of library systems and services
- ▶ Managed library staff, procurement, and budgeting for academic resources
- ▶ Coordinated institutional repository development and access to research databases

Academic Vice Dean, Faculty of Computing and Information

Academic Vice Dean, Faculty of Computing and Informatics

📅 *Mizan-Tepi University, Ethiopia | 2021-2023*

- Oversaw 5 departments and managed faculty performance
- Coordinated academic programs and faculty development

Head, Department of Computer Science

📅 *Mizan-Tepi University, Ethiopia | 2019-2021*

- Led the Department of Computer Science with 37 faculty members and 84-122 students
- Oversaw academic planning, faculty recruitment, and curriculum development
- Coordinated research activities and industry-academic collaborations
- Organized departmental seminars, workshops, and quality assurance reviews

Community Service

- Developed Mobile-based Covid-19 outbreak information management system to monitor travelers' information
- Project Evaluation services at Mizan Agricultural Vocational and Educational Training (A-VET) College
- ICT Awareness training services around Tepi Town
- Small-scale Computer Network and Security Training for High School Teacher Awi zone administration
- Contributed to the Jima University R2C National Higher Education Development Program

Research Focus

- Advanced feature extraction and model optimization in neural networks, integrating CNNs and attention mechanisms for efficient multi-modal data interpretation
- Federated learning and decentralized AI systems to enable privacy-preserving, collaborative machine learning across distributed data sources
- Multimodal learning architectures for healthcare applications and resource-constrained environments
- Natural language processing for low-resource languages

Publications (16 Total)

Kassahun A., et al. (2025)

Privacy-preserving Federated Learning with attention-based adaptive aggregation for Biometric Recognition

DOI: [10.48550/arXiv.2510.01113](https://doi.org/10.48550/arXiv.2510.01113)

Published

Kassahun A., et al. (2025)

Hybrid Predictive Modeling of Malaria Incidence in the Amhara Region, Ethiopia: Integrating Multi-Output Regression and Time-Series Forecasting

DOI: [10.48550/arXiv.2510.01302](https://doi.org/10.48550/arXiv.2510.01302)

Published

Kassahun A., et al. (2025)

Adaptive Attention Fusion for Explainable Multimodal Medical Imaging

Pending

</> Technical Skills

Python

Java

C++

TensorFlow

PyTorch

Scikit-learn

OpenCV

NLTK

LaTeX

Jupyter

Google Colab

Federated Learning

Computer Vision

NLP

Languages

Amharic: Native English: Fluent

References

Dr. Eng. Khalid Kaleem Mohammed (Ph.D)

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Relationship: Former Colleagues, Mizan-Tepi University, Ethiopia

Dr. Minyechil Alehegn Tefera (Ph.D)

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