

Curriculum vitae

PERSONAL INFORMATION Mulubrhan Abebe Nerea

- Addis Ababa, Ethiopia
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Gender Male | Nationality Ethiopian

PROFESSIONAL EXPERIENCE

Ethiopia Al Institute Data Scientist/ML Expert (Jan 2023 - Present)

- Led development of an ASR model for Amharic, achieving high accuracy.
- Processed large Amharic audio/text datasets for training.
- Collaborated to integrate ASR into an Amharic audio search system.
- Implemented and fine-tuned deep learning models for ASR.

Freelance/Part Time Lecturer/Software Developer/Data Annotator/ML Expert (Oct 2021 - Jan 2023)

- Dedicated lecturer in computer science and engineering.
- Annotated Amharic language datasets for ML tasks.
- Applied ML expertise to develop/fine-tune models for Amharic tasks.
- Collaborated on projects, meeting deadlines.

Microgeez IT Solutions plc Software Developer and Tester (Oct 2019 - Oct 2021)

- Collaborated in C# software development for front-end and SQL Server back-end.
- Developed test plans, executed procedures, and validated software functionality.
- Maintained documentation, provided training, and support during deployment.

and Computer Engineering Dept

Adigrat University / Electrical Computer Engineering Lecturer (Sep 2017 - Oct 2019)

- Dedicated educator in computer engineering.
- Proficient in conveying complex concepts and guiding students in hands-on projects.
- Actively involved in research, contributing to advancements in computer engineering fields.

EDUCATION

Engineering

B.Sc. in Electrical and Computer Mekelle University (Sep 2012 - July 2017)

M.Sc. Computer Engineering Addis Ababa University (Pending)

PROJECTS(LATEST)

Amharic ASR Model Development



- Designed/developed a highly accurate ASR model for the Amharic language.
- Acquired, cleaned, and curated a comprehensive dataset of Amharic audio recordings.
- Implemented the ASR model using deep learning techniques.
- Deployed the ASR model for real-time transcription and integrated it into an Amharic audio search system.

Amharic Audio Search System

- Created an Amharic audio search system allowing users to search specific content within Amharic audio recordings.
- Seamlessly integrated the ASR model for real-time transcription and indexing.
- Implemented advanced indexing and query processing techniques for efficient content retrieval.
- Designed user-friendly interfaces for search and retrieval.

SKILLS

Programming Languages Python (NumPy, pandas, scikit-learn), JavaScript (React, node)

Deep Learning Frameworks TensorFlow, PyTorch, Keras

Natural Language Processing Text pre-processing, word embedding, sentiment analysis

> **Data Analysis** Exploratory data analysis, data visualization (Tableau, Power BI, Excel)

> > Tools Jupyter Notebook, PyCharm, Git, GitHub

SQL Databases

LANGUAGES

English Fluent Amharic Native Tigrinya Native

CERTIFICATIONS AND PROFESSIONAL TRAINING

Google Data Analytics Oct 2023 **Professional Certificate**

(Coursera)

Cisco Academy Certifications Data Analytics Essential, Python Essentials 2, Introduction to Data Science (2023)

Introduction to Python Free Certificate, 2023

(DataCamp)

Introduction to Python for Data Free Certificate, 2023

Science and JAVA (CoRise)

Deep Learning Specialization Dec 2021 (Coursera)

REFERENCES

Rosa Tsegaye, PhD Director, Natural Language Processing Division, Ethiopia Al Institute

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