Abdulmunim Jundurahman Jemal

Machine Learning Engineer | NLP | Backend Engineer

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EXPERIENCE

Amazethu, California, US (Remote) – ***Software Engineer***

MAY 2024 - PRESENT

Developed NLP models for a speech-based language learning app, optimizing speech recognition and translation accuracy for improved user interaction.

SMARTi Co., Fukuoka, Japan (On-site) — ***AI Engineer***

OCT 2024 - NOV 2024

Designed and deployed advanced speech data processing pipelines, improving efficiency in large-scale AI applications of IoT user command recognition and fine-tuning models for real-time performance.

Icog Labs, Addis Ababa, Ethiopia (Hybrid) — ***AI Research Intern***

Feb 2024 - May 2024

Engaged in Neuro-Symbolic AI research, translating theoretical concepts into executable algorithms, and contributing to Explainable AI methodologies.

Lesan.AI, Munich, Germany (Remote) — ***NLP Intern***

June 2023 - Jan 2024

Built scalable data pipelines, and automated preprocessing for multilingual low-resource machine translation, and contributed to end-to-end system improvements in the backend.

EDUCATION

Addis Ababa University, Ethiopia — *Bsc. Software Engineering (AI Specialization)*

Sept 2021 - June 2026 (Expected)

Built a strong foundation in mathematics, algorithms, statistics, and engineering principles, focusing on their applications in AI.

CGPA 3.88/4.00

PROJECTS

Afan Oromo News Classification System — *Personal Research Project*

Researched and implemented an entire custom data collection and preprocessing pipeline for "Afan Oromo" - a low resource local language, achieving 96.5% accuracy, 0.95 precision, and 0.97 recall in a news classification task. Additionally, the dataset is published on Kaggle for public usage.

Amharic Context Aware Spell Checker — *University Course Research Project*

Developed a first-of-its-type "Context-Aware" spell checker for Amharic - a low-resource local language. Improving the weakness of previous systems that were dependent only on dictionary lookup.

SKILLS

Programming Languages: *Python, Javascript / Typescript, C*

Domains: *Natural Language Processing, Machine Learning, Speech Processing*

Technologies: *Tensorflow, PyTorch, FastAPI, Docker, PostgreSQL, Git, Kubernetes*

Additional Tools / Libraries: *Hugging face, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, NLTK, SpaCy, Gensim*.

CERTIFICATES

Machine Learning Specialization - *Stanford University (Coursera)*

Natural Language Processing Specialization - *DeepLearning.ai (Coursera)*.

Database Design Specialization - *University of Michigan (Coursera)*.

LANGUAGES

English
Amharic
Afan Oromo
Arabic
Japanese (Basic)