

# FRANSI AYELE

Elec & Computer Engineer

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Addis Ababa, Ethiopia

## Summary

A Computer Engineer skilled in building and deploying machine learning models. Seeking a full-time machine learning engineer or related role to drive data-driven solutions and innovations

## Core Skills

**Machine learning related :** Machine learning model development, deep learning, natural language processing (NLP), computer vision, neural network design, data preprocessing, feature engineering, model evaluation, hyperparameter tuning, supervised learning, unsupervised learning, transfer learning, ensemble learning, deployment of ML models working with large datasets, time-series analysis, data visualization, algorithm optimization.

**Tech Stack :** Python, Java, C++, HTML, CSS, JavaScript, SQL, TensorFlow, PyTorch, Scikit Learn and more.

**Other skills :** Team collaboration, Creativity, Communication, Adaptability and Time Management

## Work Experience

### Machine Learning Intern

Aug 2023 - Sep 2023

*Sync Intern, Mirzapur | India*

- Implemented Machine Learning algorithms, increasing data analysis speed by 60%, leading to faster actionable insights.
- Enhanced model performance by conducting data preprocessing (data cleaning, normalization, feature extraction) resulting in a 25% improvement in model accuracy.
- Developed and trained predictive models (classification, regression, clustering) using Python and TensorFlow, achieving a 40% boost in prediction accuracy

### Network Intern

Jun 2023 - Sep 2023

*Raras Technologies PLC | Addis Ababa*

- Led network infrastructure design and implementation, achieving a 40% improvement in system efficiency through detailed Nexus requirements gathering, architecture development, and testing.
- Mastered Cisco switches, routers, and technologies like VLANs, VRRP, and OSPF routing, enhancing network stability and reducing error rates by 50%
- Configured core network components (routing, switching, security, wireless), resulting in a robust and secure network foundation, supporting Raras' future growth and reducing downtime by 35%.

## Projects

### Brain Tumor Detection System

Jan 2024 - Jun 2024

- Developed a brain tumor detection and classification system using advanced machine learning and deep learning techniques.
- Created a convolutional neural network (CNN) model trained on a curated dataset of medical images for accurate brain tumor identification and classification.
- Employed data preprocessing steps, including image augmentation, to enhance model generalization and handle diverse image variations.
- Achieved 98.6% accuracy in detecting and 94% in classifying brain tumors, providing valuable support for medical

professionals in diagnosis and treatment planning.

- Showcases the potential of AI in healthcare, contributing to more efficient and accurate medical imaging analysis.

[\(GitHub Repo\)](#)

## Plant Disease Detection System

Feb 2023 - Jun 2023

- Developed a machine learning-based system to identify and classify various plant diseases from images.
- Built a deep learning model using Amazon Sage Maker, leveraging convolutional neural networks (CNNs) to detect disease symptoms from leaf images.
- Preprocessed the dataset, which included a wide range of plant species and disease types, through image augmentation and normalization for improved model robustness.
- Trained the system to recognize disease patterns with 95% accuracy, enabling early intervention for farmers and agricultural experts.
- Integrated the model into a user-friendly interface, allowing users to upload leaf images and receive real-time feedback on potential diseases.

[\(GitHub Repo\)](#)

## Education

### Addis Ababa Science and Technology University

Sep 2019 - Jun 2024

**Bachelor of Science** Electrical and Computer Engineering

## Certificates

- Oracle Certified AI Foundations Associate (Oracle)
- Generative AI with Large Language Models (Coursera)
- Machine Learning (Coursera)
- Machine Learning (Sync Intern)
- Data Science (Coursera)
- Software Engineering Virtual Experience (JPMorgan Chase & CO.)
- Back-End Engineering Virtual Experience (Lyft)
- Python Data Structure (Coursera)

## References

### Ashenafi Yadesa Gemechu (PHD)

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