

Full name: Agbaje Ayomipo M.

Preferred name: AY

Location: Akure, Nigeria

**Short headline**: Computer Science | Machine Learning | Deep Learning | Computer Vision

**Short bio (card):** Member of AI for Good Young Leaders Hub (Lagos), building community-led AI pilots.

**Long bio**: Agbaje is a member of the Lagos Hub for AI for Good Young Leaders, coordinating collaboration, mentorship and community-driven pilots that address energy sustainability, education and good health. Agbaje focuses on translating research into usable tools and supporting youth leadership across West Africa.

**One-sentence mission**: I utilise AI to develop tools and partnerships that enable communities to adapt to climate risks and expand opportunities for young people.

**Core skills:** Computer Vision, Deep Learning, Machine Learning, Time Series Forecasting, Python, PyTorch

**Focus areas:** Machine Learning for Agriculture,, Computer Vision for Health, Environmental and Cleanliness, Time Series Forecasting for Energy

## Notable projects:

## 1. Cleansight – Real-Time Waste Detection and Environmental Rewards

Cleansight is a computer vision—based system designed to promote environmental cleanliness. It uses real-time object detection to identify waste materials such as plastics, bottles, cans, and paper in public or private spaces. When users collect and dispose of the detected waste properly, the system automatically tracks the activity and awards them points or rewards. These points can be redeemed for incentives, encouraging active participation in maintaining clean surroundings. The system was deployed through mobile devices, making it accessible for communities and cities aiming to promote sustainability.

## 2. Plant Disease Detection Using Computer Vision

This project focuses on applying computer vision to improve agricultural productivity and

reduce crop losses. The system uses image classification and deep learning techniques to analyze leaf images and identify signs of diseases such as leaf spots, mildew, or rust. Farmers or agricultural workers can capture images of plants using smartphones, and the model will instantly diagnose whether the plant is healthy or infected, as well as suggest the likely disease. This enables early detection and treatment, helping farmers manage crops more effectively, reduce the use of unnecessary pesticides, and increase yield.