

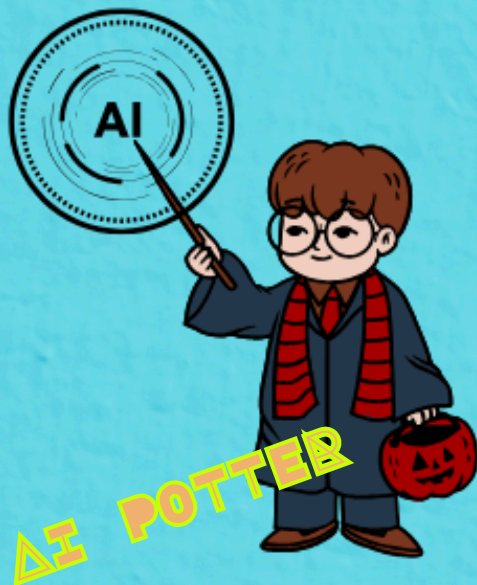


Harnessing AI Safely: Addressing the Challenges of Autonomous Systems



Women in
Data Science
Worldwide

Paris @ emlyon



Autonomous Irrigation 2.0



Explainable AI
for
Sustainable & Secure Farming



PROBLEM WE ARE SOLVING

Crop Security
Risks



Unfair Water
Distribution



Food
Security
Instability



Lack of
Explainability
& Trust



AUTONOMOUS AI-DRIVEN IRRIGATION SYSTEM

Real time
Integration of
Weather, Soil and
crop health data



Follows government
policy on distribution



Scenario
modelling using
GANs

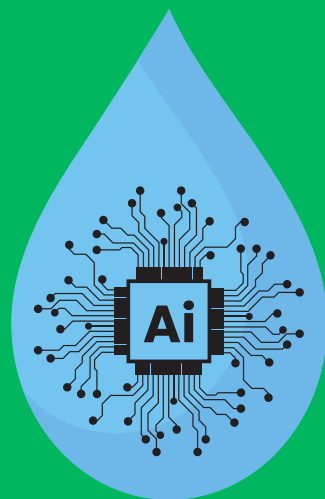


RAG on Expert
Agriculturists reports



EXPLAINABLE AI

Actions taken by
autonomous
systems
explained to
Farmers with
reasoning



LLM Powered
chatbots explain in
human-like
language

INVEST IN TECHNOLOGY FOR PLANET

Farms struggle with
anticipating how
much water they
need.

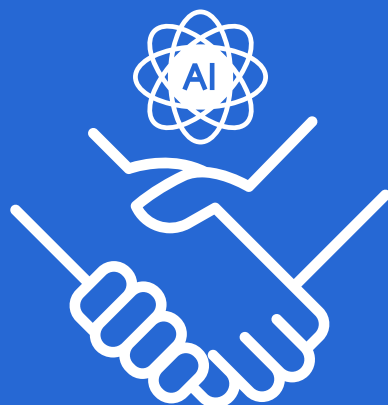


Unpredictable
calamities affect
whole supply chain
and drives inflation

Water stress is real. Big
proportion of farmers
face water scarcity and
unfair distribution

TRUSTABLE AI

Reinforcement
Learning (RL)
learns from soil
moisture,
temperature &
evapotranspiration
data



Farmers receive
accurate and timely
irrigation
recommendations.
Best practices and
recommendations
are fed to RAG

INNOVATION

Help farmers
with explanations
in natural
language.

Adherence to
water distribution
policy



Multiple
Scenario ready
irrigation system
to tackle
unpredictability
of weather