DeepTech
Transforming AgriTech

Karim Amer
Co-founder and CTO

www.vais.ai
Company Overview

Visual and AI Solutions (VAIS) is a leading DeepTech/AgriTech company.

Creates proprietary, deep learning-based technologies.

Core tech expertise includes machine learning, EO data processing and management, AI-cloud architectures and super resolution imaging.

VAIS provides a wide array of solutions in precision and climate-smart agriculture, sustainability, and agri-focused geospatial analytics.
FarmGuru  A comprehensive precision ag platform

Hardware-free, AI-powered platform for precision and climate-smart agriculture.

Comprehensive set of digital agriculture services packed into intuitive mobile and web applications.

Increases farm revenues and reduces costs by enabling robust, data-driven decisions.

Annual subscription based on field area.
Value Proposition

- Reduce Water Consumption and Alleviate Drought Effects
- Empower Farmers and Improve Revenues
- Enable Sustainable Agriculture and Lower Carbon Footprint
- Increase Yield and Mitigate Climate Change Impacts
Impact  Scalable savings and enhanced productivity

Irrigation Optimization

5.38 million liters irrigation water saved

October 2023 till April 2024. Potato field, 10 acres, drip irrigation using the Irrigation Intelligence module. Equivalent to annual water needs of 76 people. Carbon savings in the same period: 200 kg CO₂e

Disease Control

1,400 USD fungicide cost reduction

Potential cost reduction in an onion field with area of 100 acres resulting from reducing fungicide spraying applications (downy mildew) based on disease probability provided by the Disease Scope module.

Crop Monitoring

70,00 USD yield increase

Achieved through early detection of crop stresses in 3 fields: 125 acres potatoes, 140 acres peanuts and 10 acres grapes. Crop Insights (stresses + leaf water) detected pivot nozzle problems and waterlogging regions.
Team 15 talents (most with M.Sc. or Ph.D.) and 2 advisors

Mohamed ElHelw
Co-founder and CEO
- Ph.D. in Computing (Imperial College London).
- Professor of Visual Computing and AI. Recipient of Cairo Innovate Award 2014.
- Ex–Imperial College (UK), – Cyber Minds 300 (Toronto, Canada).

Karim Amer
Co-founder and CTO
- M.Sc. in Computer Science specialization Deep Learning and AI.
- First Kaggle Master of Data Science from Egypt (top 1% worldwide).

Key team profiles

Prof. Benny Lo, Ph.D.
Senior Advisor

ElSayed Naeem, Ph.D.
Head of Agronomy Team

Ahmed Ibrahim, MBA
Sales Manager

Amany Dawood, M.Sc.
Operations Manager

Mohamed Afifi, M.Sc.
Senior AI/ML Engineer

Mustafa El-Attar, Ph.D.
Advisor
Journey so far

- **Challenges:** First time founders, finding the right talent
- **Funding Sources:** Service contracts (local and international), Nilepreneurs grant and Microsoft grant (cloud credits)
- **Team size:** 8
- **Objective:** Learn about starting a company, creating a product prototype
- **Outcomes:** First launch of FarmGuru
- **Honors:** Top North African Digital Innovation startup
Journey so far

- **Challenges**: Funding for deep tech and climate tech startups are limited
- **Funding Sources**: Catalyst Fund (Equity)
- **Team size**: 10
- **Objective**: Complete the product and pre-seed fund raising
- **Outcomes**: Second launch of FarmGuru and got funding from 2 more VCs
- **Honors**: Top 5 Digital Innovation startups in Africa
Journey so far

- **Challenges**: Agritech market in Africa is new and sales cycle tends to be long
- **Funding Sources**: A15 and CRAF (Equity), EBRD (Grant)
- **Team size**: 15
- **Objective**: commercialization of FarmGuru and improving company operations
- **Achievements**: 3 contracts with major agricultural companies in Egypt and US. Expecting USD 100k annual recurring revenue by end of 2024
Funding sources

- **Equity Funding**: 500,000 USD - 39.7%
- **Bootstrapping**: 300,000 USD - 23.8%
- **Grants**: 70,000 USD - 5.6%
- **InKind**: 390,000 USD - 31.0%
Next milestones

- $1 million annual recurring revenue
- Close seed round by early next year (raising $2M)
- Expand to other countries
- Save 1 trillion liters of irrigation water (equivalent to annual water needs of 1.4 million people)
Learnt Lessons

• Before you start, make sure you have domain and field knowledge and fully aware of problems and gaps.
• Start small and grow gradually; ideally at TRL 5 or 6.
• Expect time and cost transiting to TRL 8 or 9 and lots of validation/use cases before starting actual sales.
• Expect to contact 100 investors to get one on board (unless you are lucky).
• Manage your cash burn very carefully (opposite to what some investors want).
• Optimize your OpEx especially your AI cloud costs.
• Make use of interns and part-time employees.
• Be honest yet show the potential.