Renovation of Olive Cultivation Sector Using AI

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Thomas Jefferson once said: 'The olive tree is surely the richest gift of heaven.' However, despite their economic significance, olive crops remain vulnerable to diseases, resulting in farmers losing their yield and leaving them struggling to sustain themselves as their crops succumb to illness. The developing world has a significant lack of information regarding olive tree diseases, contributing to costly and time-intensive treatment approaches. Using Artificial Intelligence, olive diseases can be detected in fraction of seconds, making it 99.1% quicker and easier. Employing a special drone equipped with an autonomous navigation system for diseased trees treatement. OLIVY is a multi-platform system that uses different trained AI models for tree health analysing using the leaf of the tree , it supports the planning of olive disease management in developing countries by automatically collecting coordinates of infected areas and storing them in a substantial database, which holds immense potential for countries striving to access such crucial information.Furthermore, OLIVY incorporates a drone that is automatically activated when the trees are not healthy. It autonomously flies to the targeted tree, detects its trunk, and sprays liquid fungicides to help treat the disease. OLIVY revolutionizes olive crop management through an AI-based multi-platform system for precise solutions for disease control and crop disease treatement.

Awards Won:
King Abdulaziz &amp
his Companions Foundation for Giftedness and Creativity: Full Scholarship from King Fahd University of Petroleum and Minerals(KFUPM) (and a $400 cash prize)
King Abdulaziz &amp
his Companions Foundation for Giftedness and Creativity: NOT TO BE READ -- $400 cash prize for each Full Scholarship from King Fahd University award recipient
Qatar Research, Development, and Innovation Council: The Qatar Research, Development, and Innovation Counil awards will recognize 10 projects in the following categories: &#x0D
• Agriculture and Water Management&#x0D
• Personalized Healthcare&#x0D
• Climate and Sustainability&#x0D
• Emerging Information Technologies