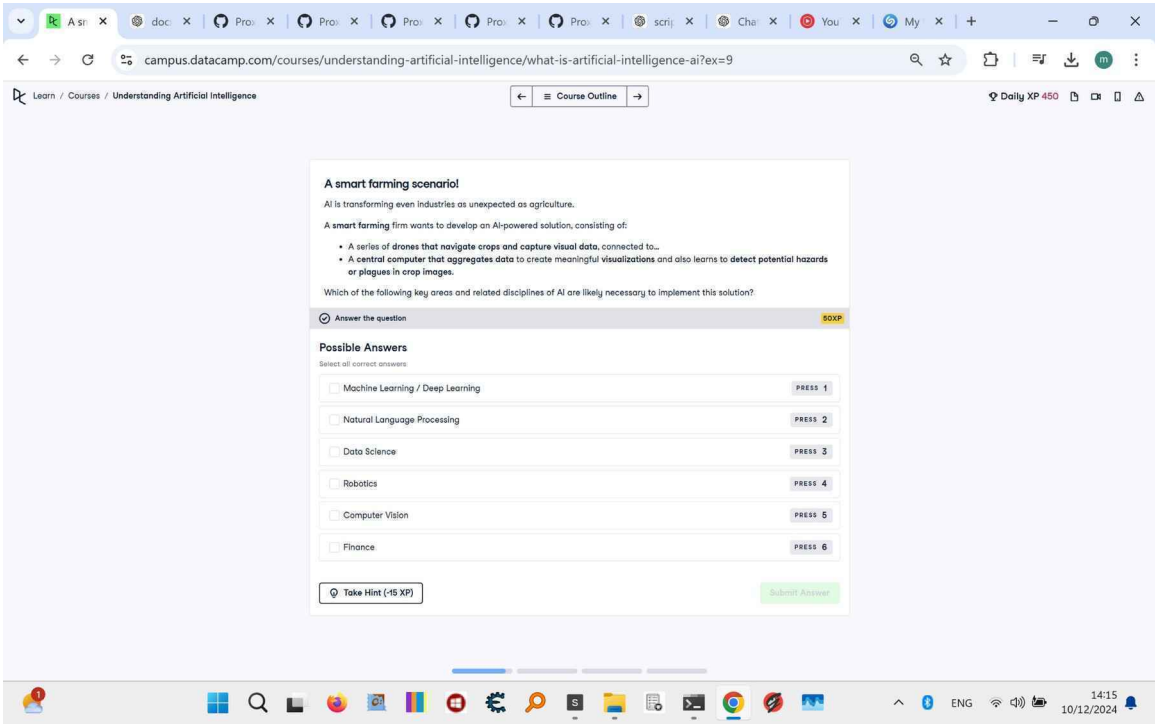
A Smart Farming Scenario



Question

AI is transforming even industries as unexpected as agriculture.

A smart farming firm wants to develop an AI-powered solution, consisting of:
- A series of drones that navigate crops and capture visual data, connected to...
- A central computer that aggregates data to create meaningful visualizations and also learns to detect potential hazards or plagues in crop images.

Which of the following key areas and related disciplines of AI are likely necessary to implement this solution?

Solution

The correct answers are:
- Machine Learning / Deep Learning
- Robotics
- Computer Vision
- Data Science

Explanation

1. **Machine Learning / Deep Learning:** These are essential for the central computer to learn patterns in crop data and detect potential hazards or plagues.
2. **Robotics:** Drones navigating through crops are a part of robotics, which involves autonomous movement and data collection.
3. **Computer Vision:** This is required to analyze visual data captured by drones to identify patterns, hazards, or crop issues.
4. **Data Science:** Data Science supports the aggregation and meaningful visualization of data collected by drones and processed by the central system.

Other disciplines like Natural Language Processing or Finance are not directly applicable to this specific scenario.