Tractor Controls

Using closed-loop motor commands

Future waypoints created on-the-fly

Pre-programmed path of waypoints through orchard

Implementation

Move into path from surrounding field

GPS

Odometry and INS

LIDAR

Status: Odometry navigation

Status: Distance and manual navigation

Status: Lidar navigation

The Mission

Solution: Create an autonomous tractor to do the spraying instead

Spraying pesticides throughout an orchard is dangerous, dirty, and dull

The Motivation

Robots don't mind pesticides

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Autonomous Orchard Navigation

Rocam

Program in Engineering
Scope