Farm Robotics Challenge

Self-guided Tractor

Fertilizers are applied to the soil of crop fields to supply nutrients necessary for plant growth. Spreading fertilizers on large fields is a time consuming task. A robot that can spread fertilizer on a field could free up time for farmers to attend to other important farm tasks. Design and build a self-guided tractor robot that could potentially be used to spread fertilizer on a farm field.

The robot should be able to:

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- ☐ Drive through at least two rows of the farm field
 - Successfully avoid any obstacle encountered



Farm Robotics Challenge

Moving Hay Bales

Hay is used as livestock feed. It is grown, harvested, and baled in the spring and summer and stored to be used throughout the year. Hauling hay is a physically demanding and time consuming task. A robot that can haul hay could free up time for farmers to attend to other important farm tasks. Design and build a robot that could be used to move hay bales from the farm field to the barn for storage.

The robot should be able to:

- ☐ Pick up a hay bale from the field
- ☐ Move the hay bale to the barn to be unloaded

