TR-1 AgGrowBot

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Shaping The Future Of Autonomous Weed Removal

Capstone Team

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Sponsors

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Key Project/Process

Machine being able to move semi-autonomously throughout the field spraying and identifying weeds

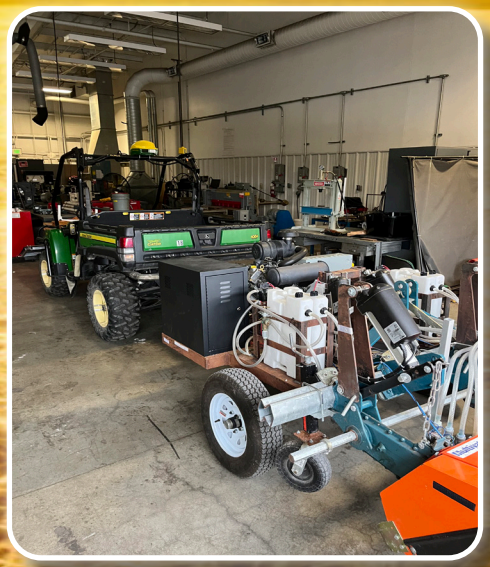
List Of Features

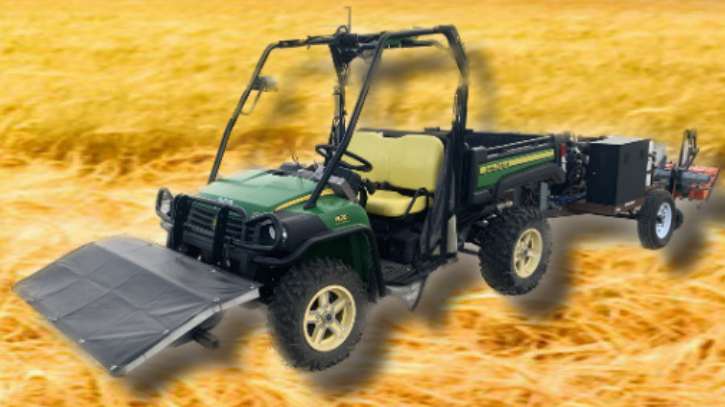
John Deere 4240 Display
Rigid ATU Bracket Design
John Starfire 6000 Display, 600 ft
Range Kill-Switch
Variable Speed Cruise Control
Onboard Weed Identification
Weed Eradictation By Chemical Application/Rototilling

Value Proposition

The AgGrowBot shapes the future of autonomous weed removal by providing students with hands on experiences designing an environmentally friendly, semi-autonomous device.

Reduces chemical use and compaction, creating a more sustainable agriculture environment





Problem

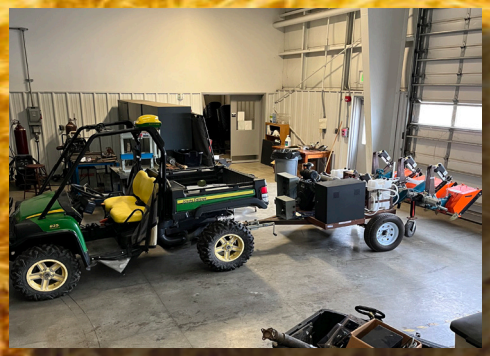
AgGrowBot needs to operate autonomously

Potential Solutions

-use John Deere receiver & monitor
-use another technology, such as Raven
-develope steel steering bracket
-speed control & kill switch for control & safety

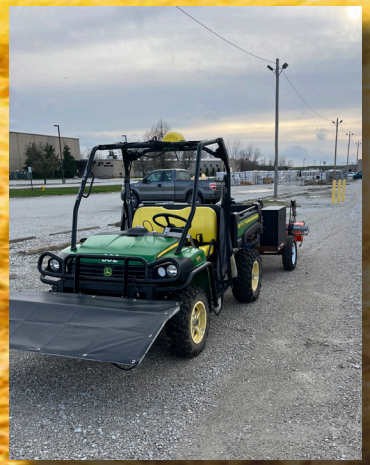
CUSTOMER

Small Farmers
Specialty Farmers/Researchers



Technical Data

Within 3 inch accuracy
as shown in the image below



SUMMARY

AgGrowBot can move semi autonomously through a field while identifying and spraying weeds.

COMPETITIVE ADVANTAGE

Lightweight
No Driver Needed
Low Compaction
Identify Weeds & Plants
Multiuse Machine
Semi-autonomous