



# CHALLENGE I: THE BRAIN

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## WHAT IS BRAIN?

- Software developed by Iron Ox to collaborate different machines on a robot farm
- Company's Grand Vision: Create a fully-autonomous farm where software and robotics fill the place of human agricultural workers
- “The Brain” brings the series of robotic arms and movers together
- Human inputs are still required
- Solves: Shortage of agricultural workers and shipping distance



# REVERSE ENGINEERING “THE BRAIN”



AI LANES



THE BRAIN  
CONTROL



AI-GPS

# THE BRAIN AND AI-GPS IN DEPTH

- **Road Network Management: Software: ArcMap**

Applications: Attribute Assistant

Database: Road Characteristics, Road network management and local government

- **Machine Learning**

To learn from the surrounding cars or buses, choose routes that are least dense with traffic

- **Artificial Neural Networks**

Replicates the way humans learn

- **AI-GPS**

placed in the car receives signals and information from the brain



## COMMERCIAL FEASIBILITY



COST LESS THAN NORMAL  
CARS- COVERS PARKING  
AND INSURANCE



EDUCATING THE PUBLIC



MAKES TRAVEL EASIER



BETTER AT FOLLOWING  
RULES

## OVERALL IMPACT OF CHANGES

- Faster
- efficient
- less cost transportation

*“The problem is less about building a perfect driving system than training bystanders to anticipate self-driving behavior” – THE VERGE*

## CHALLENGE -2 WASTE MANAGEMENT

- A product similar to an already existing recycling bin that flashes green LED light at the right disposal hole using X-ray technology
- Reduces the risk of contamination of waste
- Multiple stages is necessary so its constantly updated.





## IMPACT

- The cost of these specific garbage cans wouldn't be significantly more expensive seeing as how when produced on a mass level, the prices would be even less. Moreover, the market would be very open to it as well
- Once these big companies take this step, it would cause a chain effect causing even more people to implement it. Overall, this would lead to more accurate results from sorting and ensure everything goes in its designated place.