

# Increasing the Level of Autonomy for Agricultural Robots Through Effective Interaction and Programming Paradigms

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**I ILLINOIS**

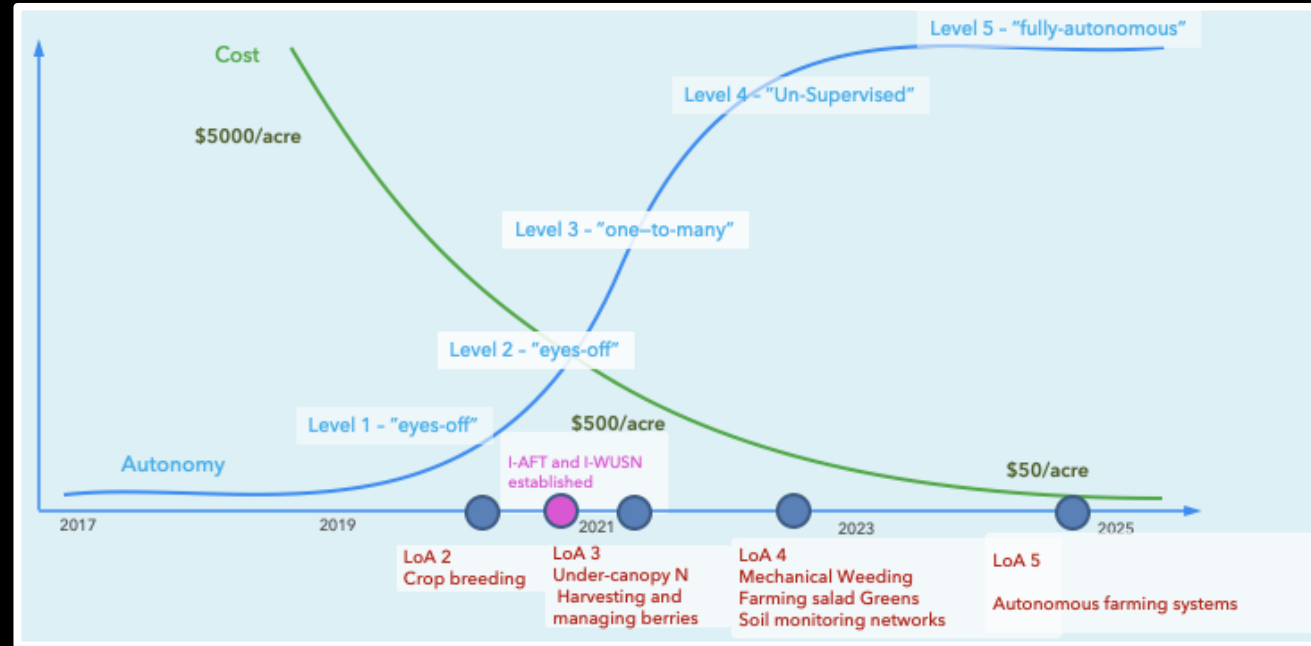
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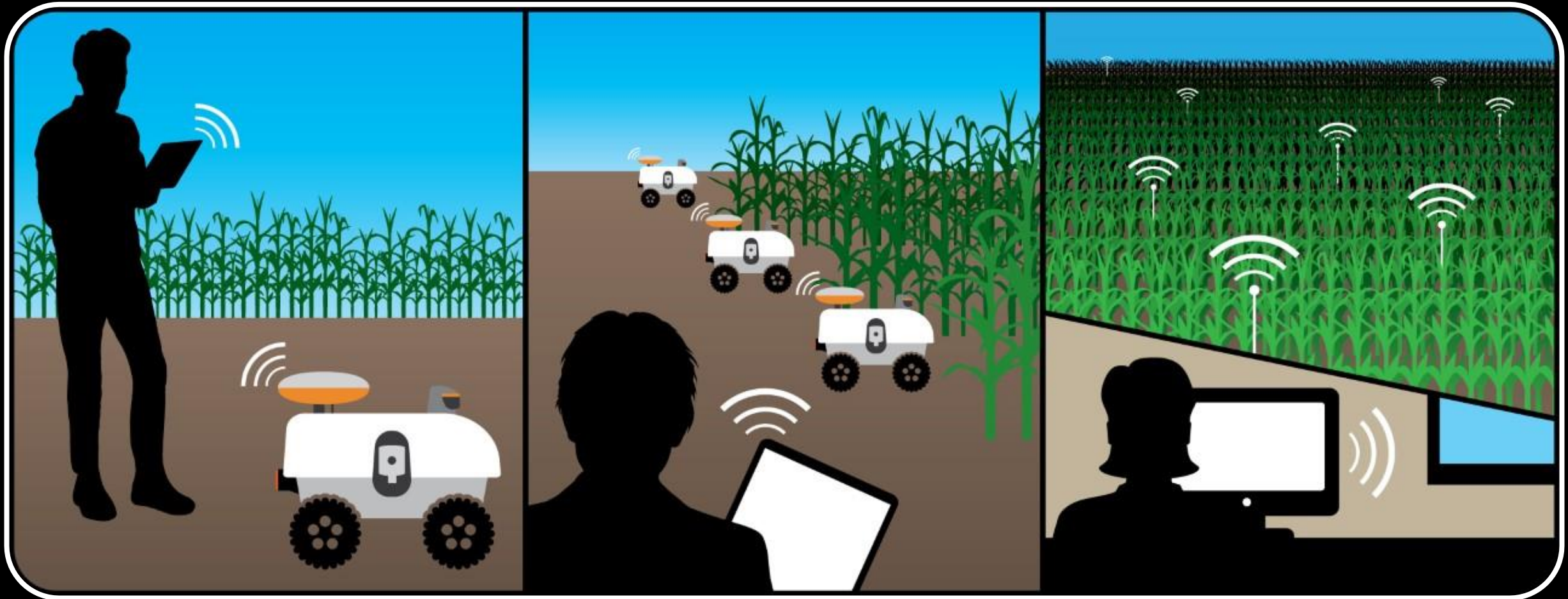
**EARTHSENSE**  
AGRICULTURAL INTELLIGENCE

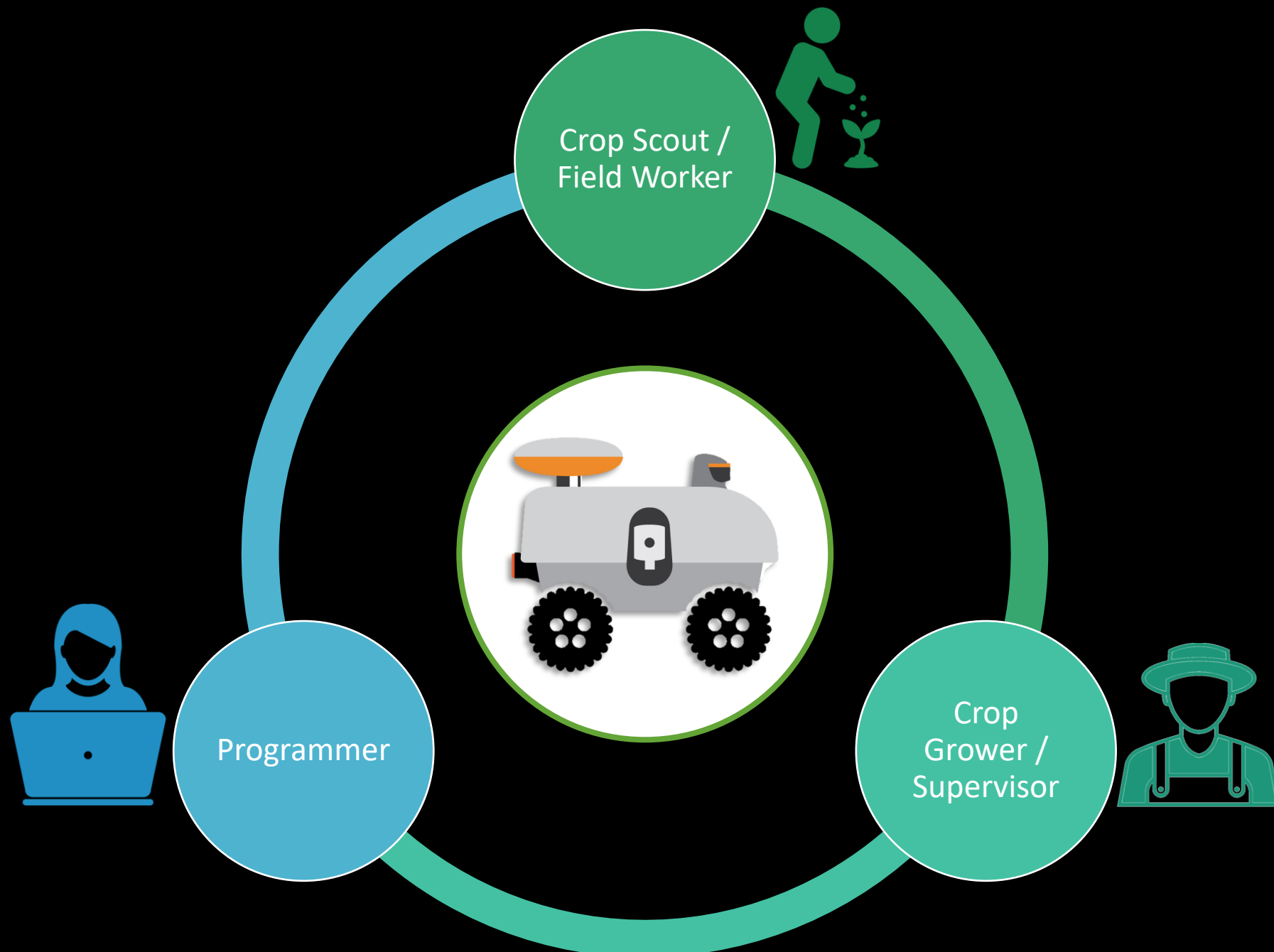
# Levels of Autonomy for Field Robots

Level – Description	Time
0 - Full manual teleoperation	n/a
1 - Robot within line of sight (hands off)	5 min.
2 - Operator on site or nearby (eyes off)	1 hour
3 - One operator oversees many robots (mind off)	8 hours
4 - Supervisor not on site (monitoring off)	3 days
5 - Robots adapt and improve (development off)	n/a

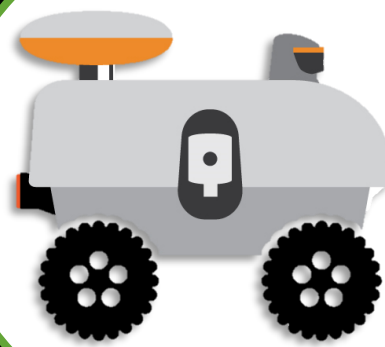


# Levels of Autonomy for Field Robots





Crop Scout /  
Field Worker



Programmer



Crop  
Grower /  
Supervisor





Thanks for your attention!  
For more information, please stop by our poster!