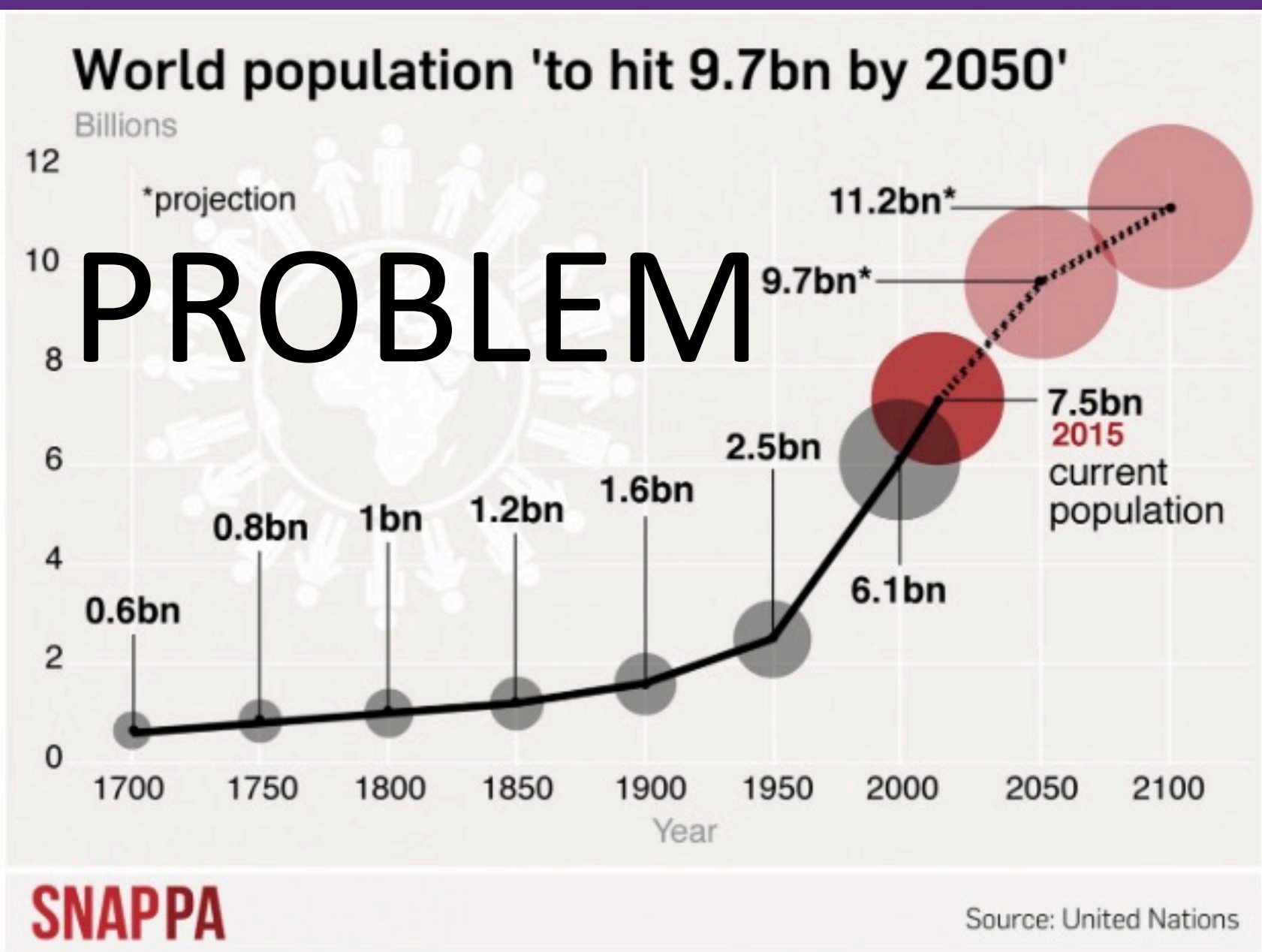


NRI: INT: Multi-Robot Farming on Marginal, Highly Sloped Lands

Work Done:



Can We Create More Arable Land? To feed the 2050 generation?

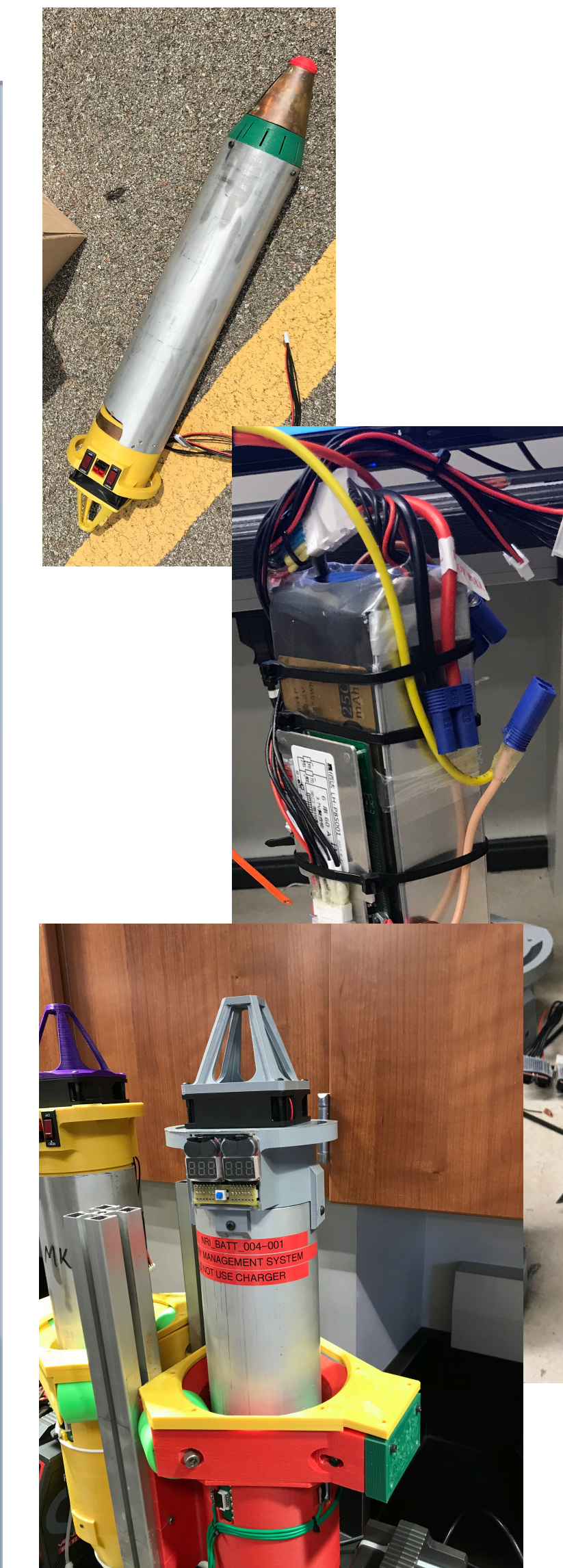
PLANTERS



PASSIVE



BATTERIES



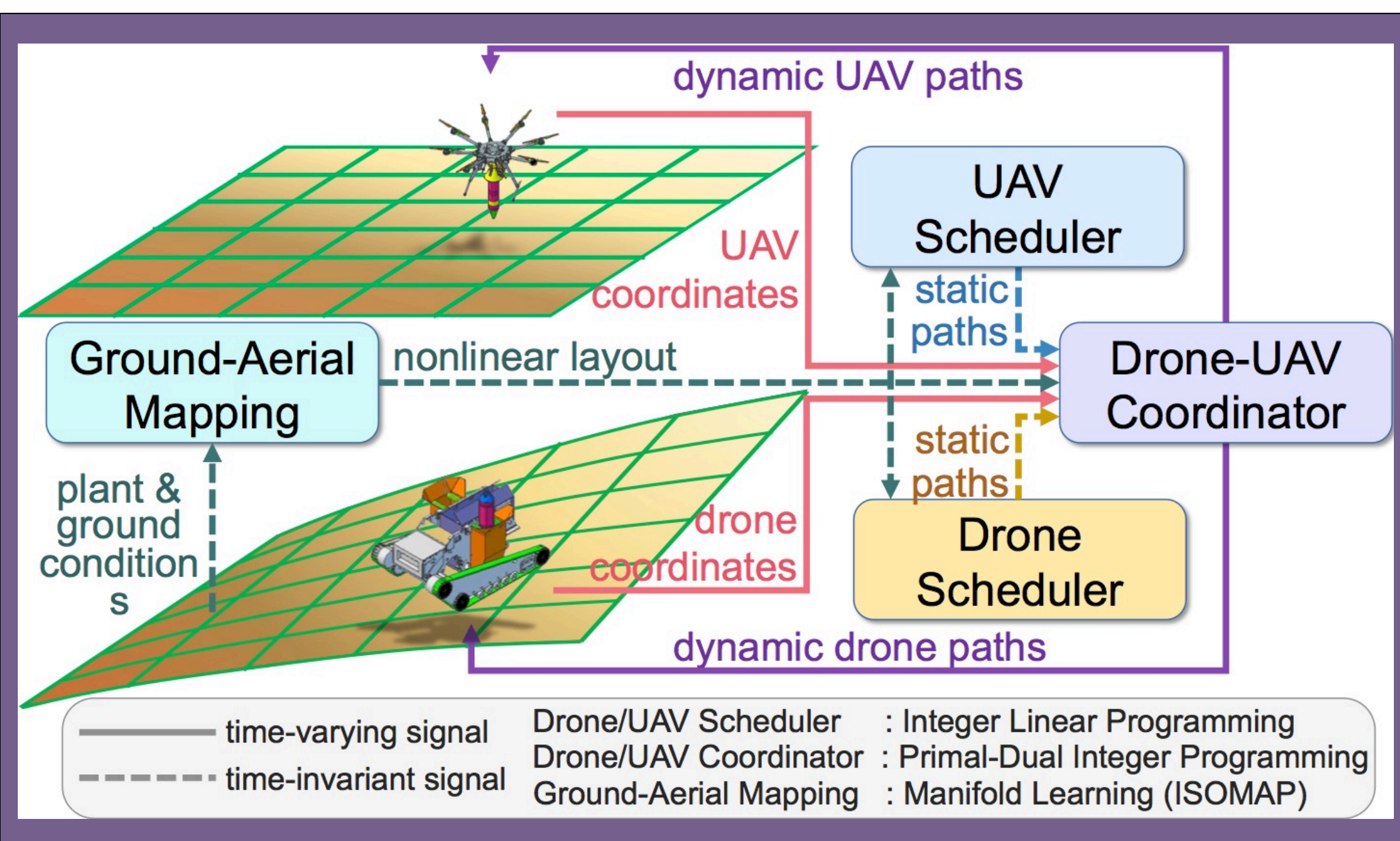
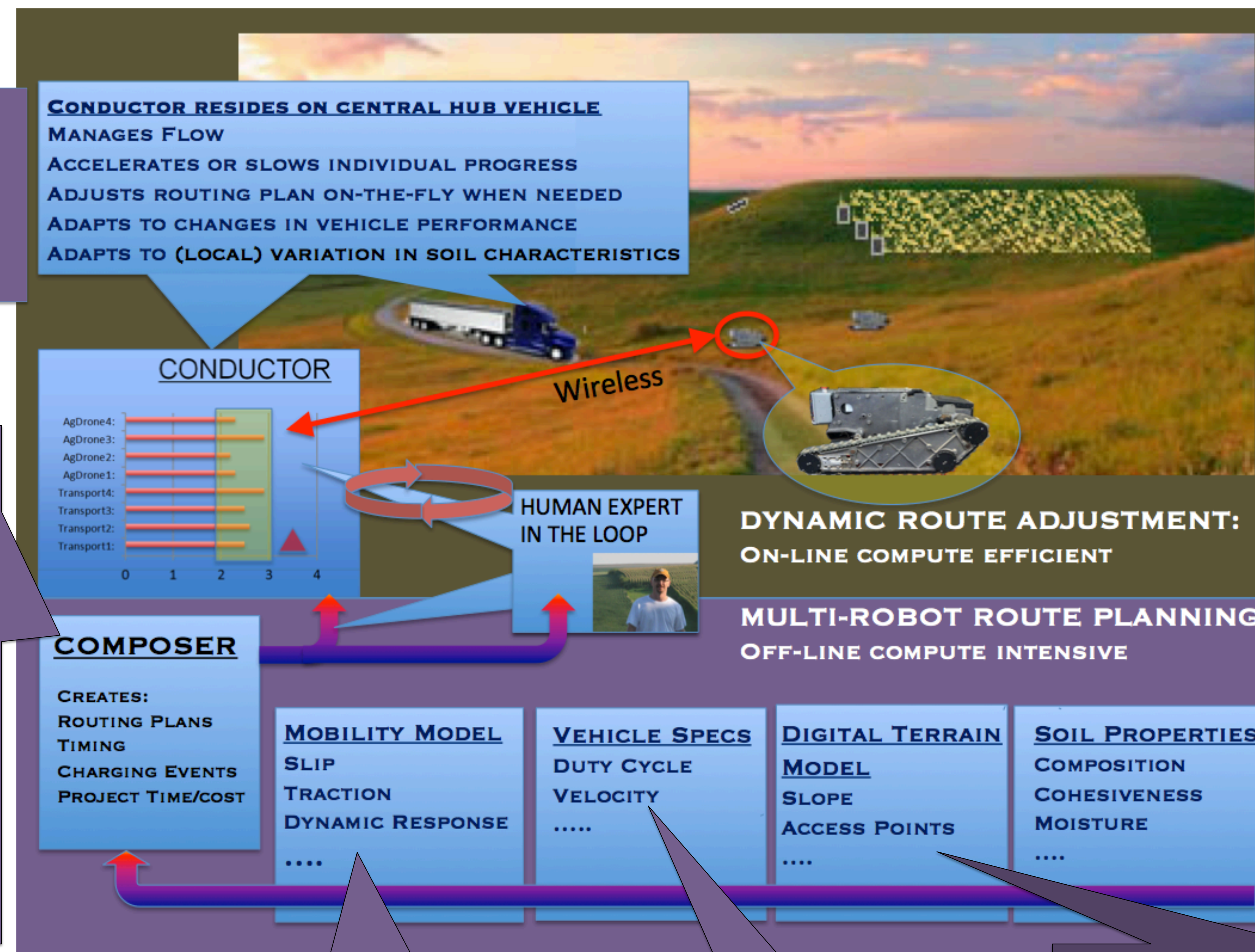
ACTIVE



- (1) The current annual rate of crop yield gain is 1/4 to 1/2 of what is mandatory to supply food needs at 2050.
- (2) Part of solution is (a) better plant genetics and (b) better crop management

By intensive geographic analysis we found that there is land, specifically about 4% of the Great Plains, that innovative robotic technology could bring into production. However, the Great Plains of the United States dominates the world in wheat production, ...

... and it does so on not quite 7% of its land.



2018 Publications:

1. Jacob Schwindt, Dr Daniel Flippo, Dr Ajay Sharda. Developing A Wireless Communication System For The KSU Biological And Agricultural Engineering Ag Drone Robot. International Journal of Engineering Inventions e-ISSN: 2278-7461, p-ISSN: 2319-6491 Volume 7, Issue 5 [May 2018] PP: 18-24
2. Jason Scheer, Daniel Flippo, Ajay Sharda. Wheat Drill for a Small Autonomous Vehicle. American Journal of Mechanical Engineering and Automation. Vol. 5, No. 1, 2018, pp. 9-14.



Biological and Agricultural Engineering



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