

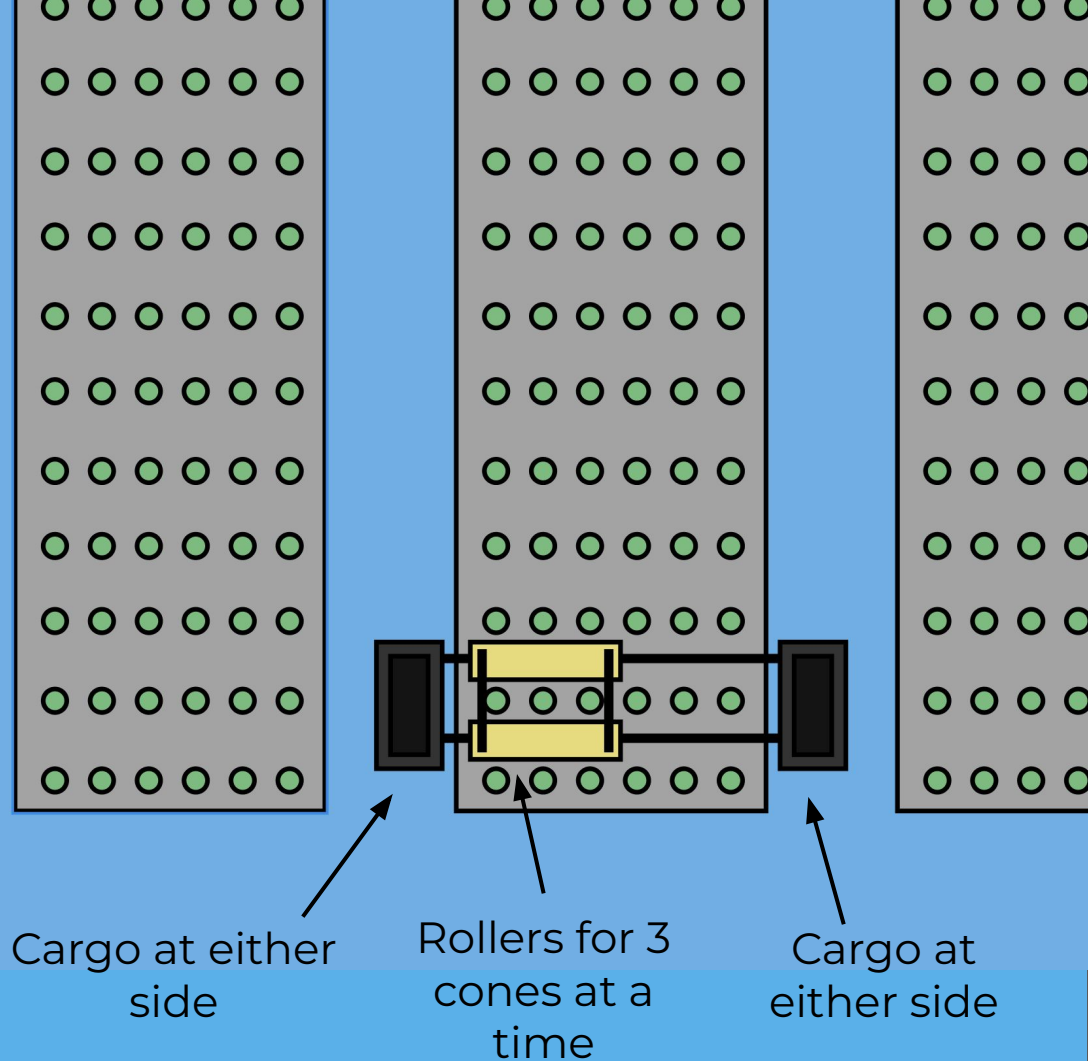
Salico - Descoping Idea

11.7.2024

Overview Diagram



Real plants are
imperfect (tilted,
varying sizes)



Modifications To The Farm:

#1 Remove every other row to create space for alignment and apriltags



#2 Straighten the cones by adding ribbing



Other Updates

#3 Human-guided repositioning for each row

#4 Top-down picking approach with multiple passes (most similar to our tests in Hawaii)

#5 Each roller will have its own motor

#6 Roller material will be urethane with a texture latex sleeve

Next Steps (Mech)

#1 Finalize the actuation method for each motion (pinching, lowering, lifting)

#2 Complete architecture of the picking connecting to the collection bins

#3 Lock new dimensions, after motor lock, design enclosures

#4 Research and purchase materials for second prototype

**** Target begin fabricating and building new prototype in 2-3 weeks****

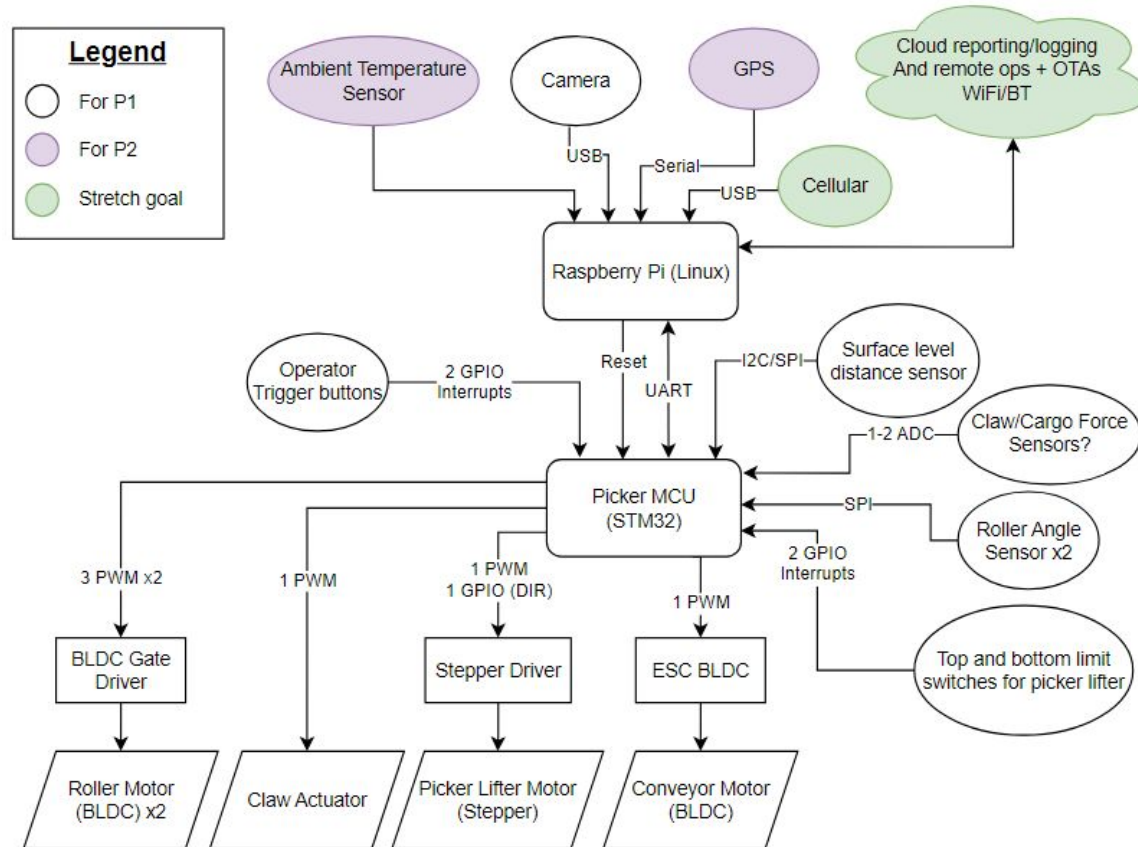
Next Steps (EE)

#1 Custom Motor Controller (Gerber out Nov 11.)

#2 Salico Controller Module Skeleton (Gerber out Nov 11.)

#3 Preliminary actuator selection for finalized picker / retrieval architecture

System Overview



Thank you!