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Project Seaweed Submersible

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# Project Seaweed Submersible

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## Project Goal

Our goal is to create an inexpensive proof of concept system that can be utilized to create a submersible for farmers and help reforesters.

## Background

~ Current seaweed farming techniques are often restricted to coastline[1]. Seaweed restorative measures encounter time limits and cost as a deciding factor.  
~ Heat tolerant kelp with potential to restore underwater bio systems difficult to implement, could be helped with unmanned assistance [2].

## Improvements

~ Established and calibrated functioning sensory system, motor control system, and input system as proof of concept.  
~ Successfully merged all existing systems.

## Results

The team successfully augmented all core systems in a functional and practical manner. The proof of concept system was able to perform in a predictable and controlled way that reflected the scope of the project.

## Implementation

With a Raspberry Pi 3 as the microcontroller, our aim is to take a modular approach to the creation of the seaweed submersible systems. All parts implemented have a saltwater proof counterpart with the possibility of integration to existing systems.

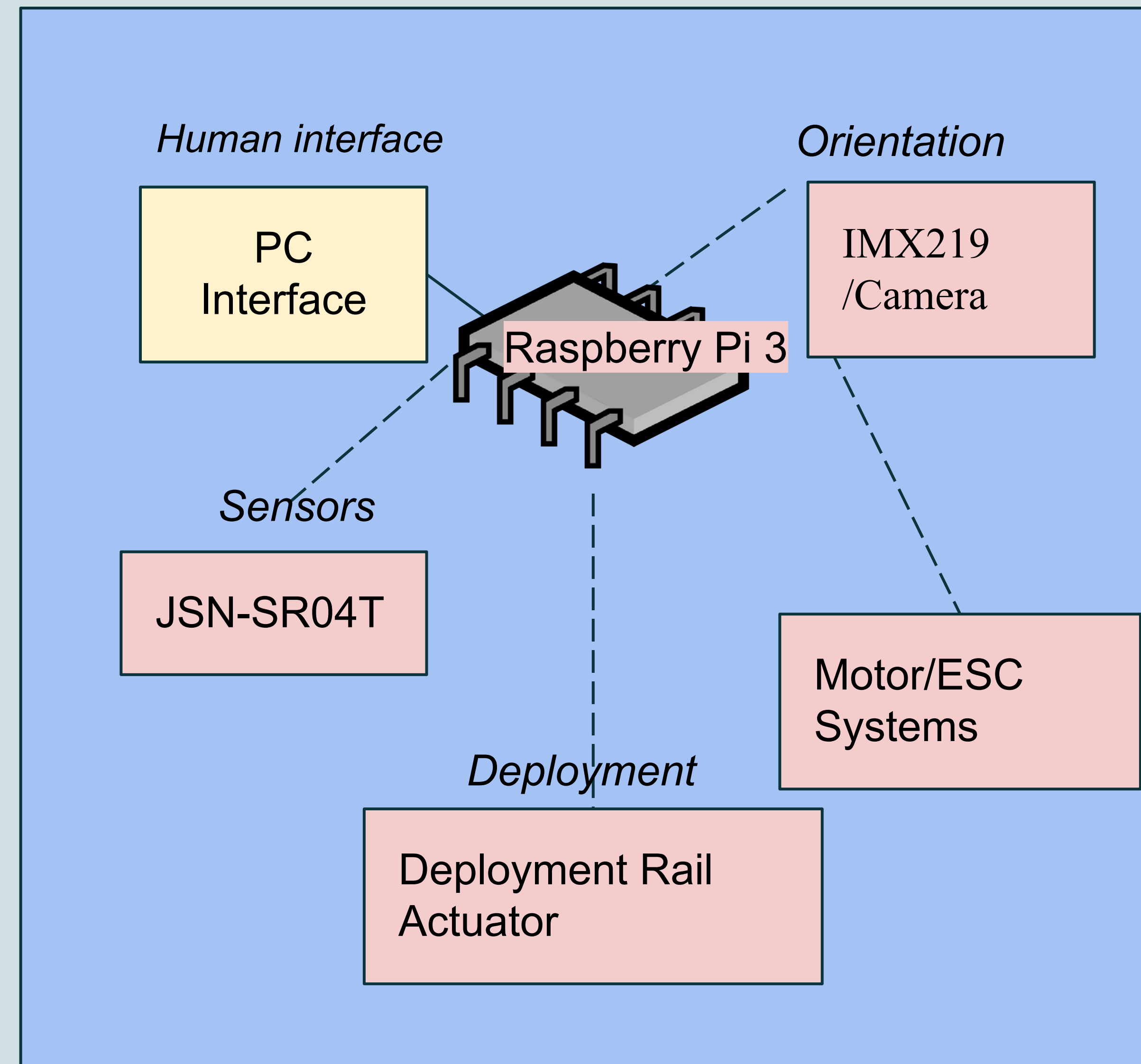


Fig. 1 Core Seaweed Submersible system components

## Figures and Photos

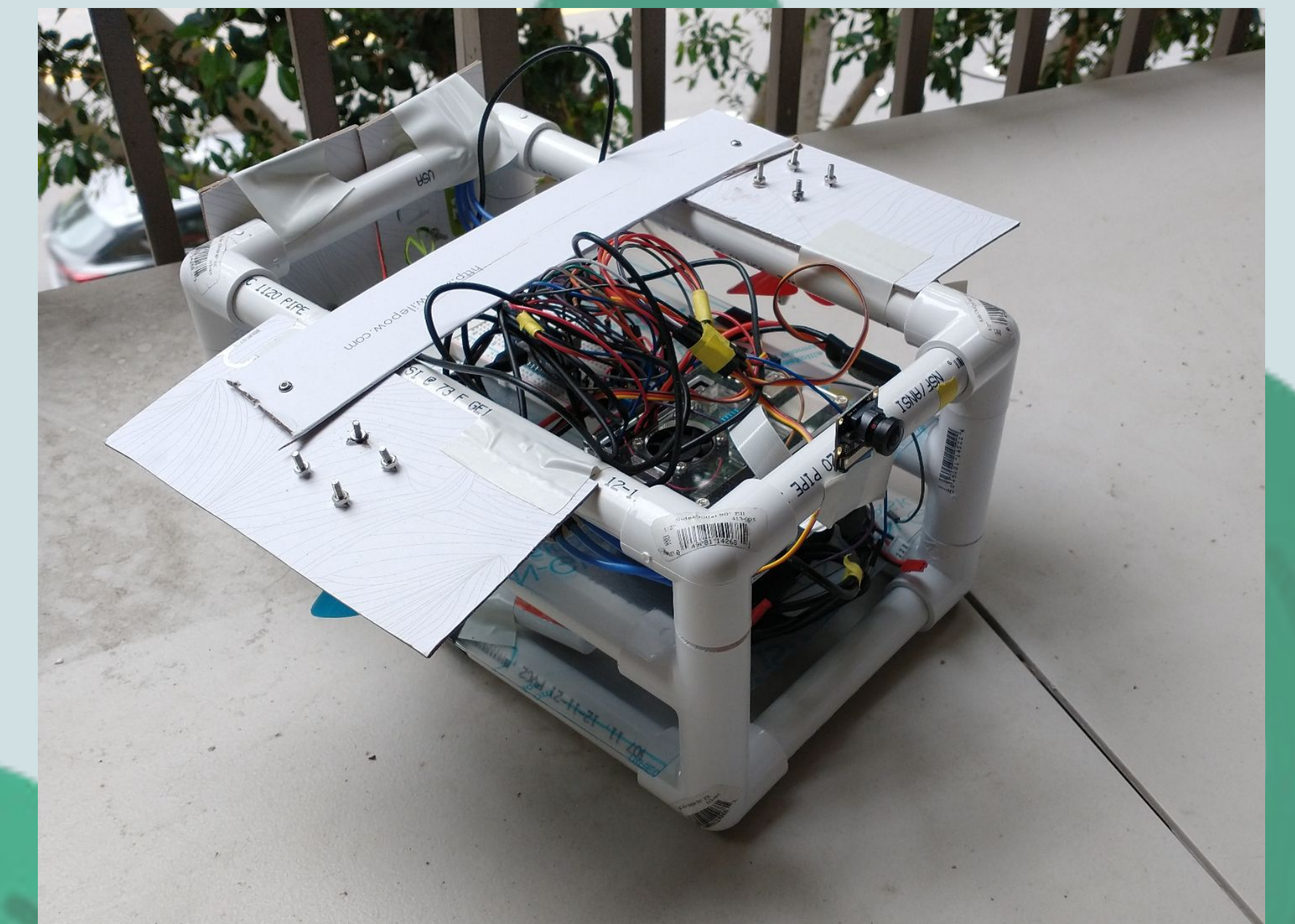


Fig. 2 Completed Project Seaweed Submersible

## References

- [1] "MANUAL ON SEAWEED FARMING." <https://www.fao.org/3/ac416e/ac416e00.htm>
- [2] D. Barnott-Clement, "'Super' heat tolerant kelp restores hope for underwater forests battling climate change," *ABC News*, Jun. 23, 2021. <https://www.abc.net.au/news/rural/2021-06-24/heat-tolerant-giant-kelp-underwater-forests-climate-change/100234664>

