

UC Irvine

SSOE Research Symposium Dean's Awards

Title

HyperXite Winter Design Review Poster 2021

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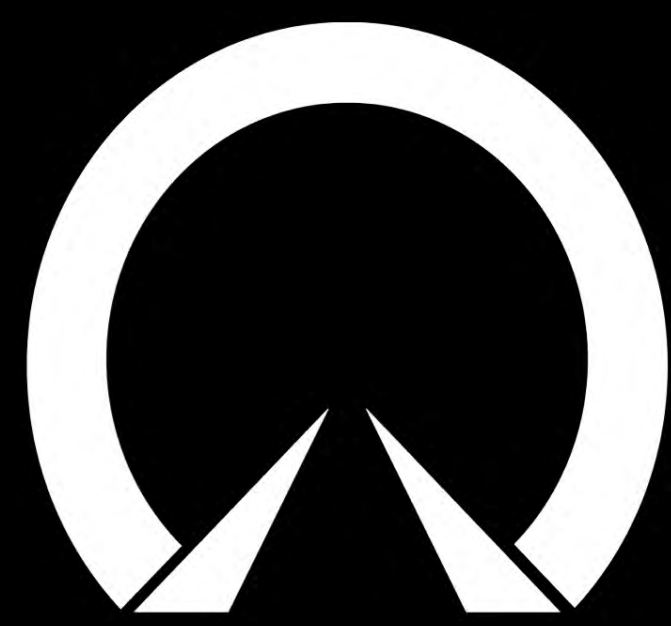
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H Y P E R X I T E

Future of Affordable and Sustainable Transportation



UCI Samueli
School of Engineering



BACKGROUND

Established in 2015, HyperXite is a team of undergraduate students endeavoring to build a Hyperloop Pod.



GOAL

HyperXite's goal is to research, design, build and validate a scalable self-propelled pod to demonstrate the feasibility of Hyperloop design concepts at a high pace of innovation.

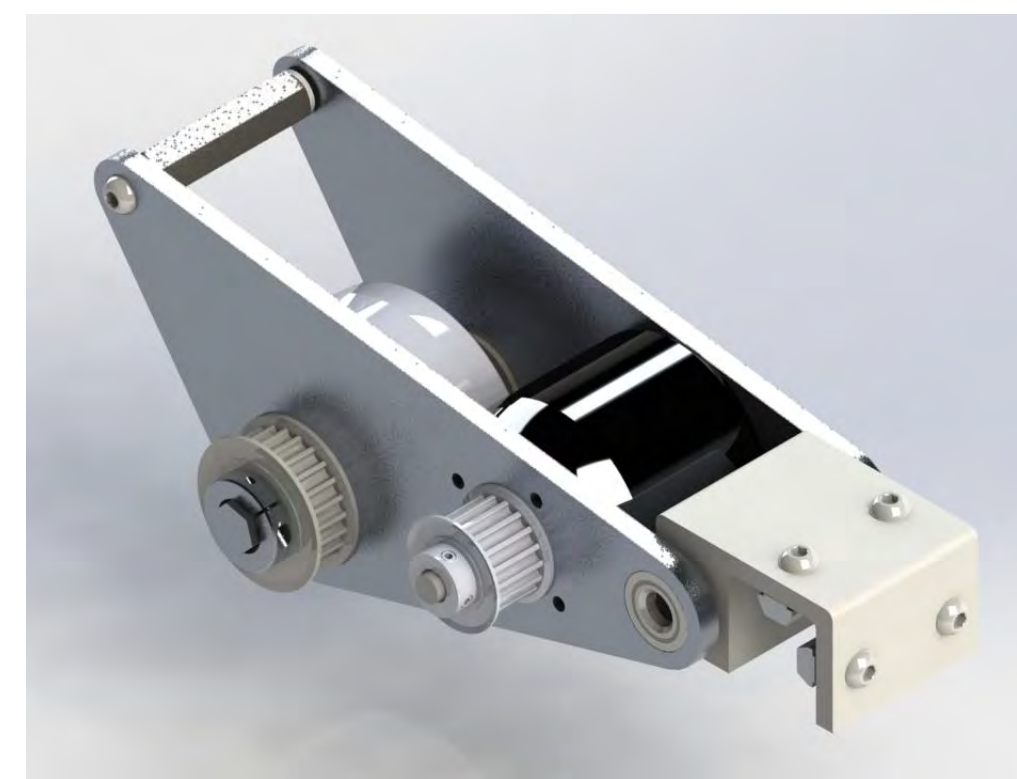


OBJECTIVES

- Real-time pod behavior monitoring.
- Pod state data logging for comparison against models.
- Complete a safe pod run on test track.

PROPOSED TIMELINE

| | |
|----------------------------------|-------------------|
| Pod Generation 1 CAD | November 5, 2020 |
| Simulations Completed | January 4, 2021 |
| Pod Generation 2 CAD | February 20, 2021 |
| Procurement and Manufacturing | April 10, 2021 |
| Pod Assembly | April 25, 2021 |
| Functional Testing | May 10, 2021 |
| Testing Ramp-up | May 20, 2021 |
| Design and Manufacturing Updates | May 30, 2021 |
| Final Testing | June 10, 2021 |



Propulsion Assembly



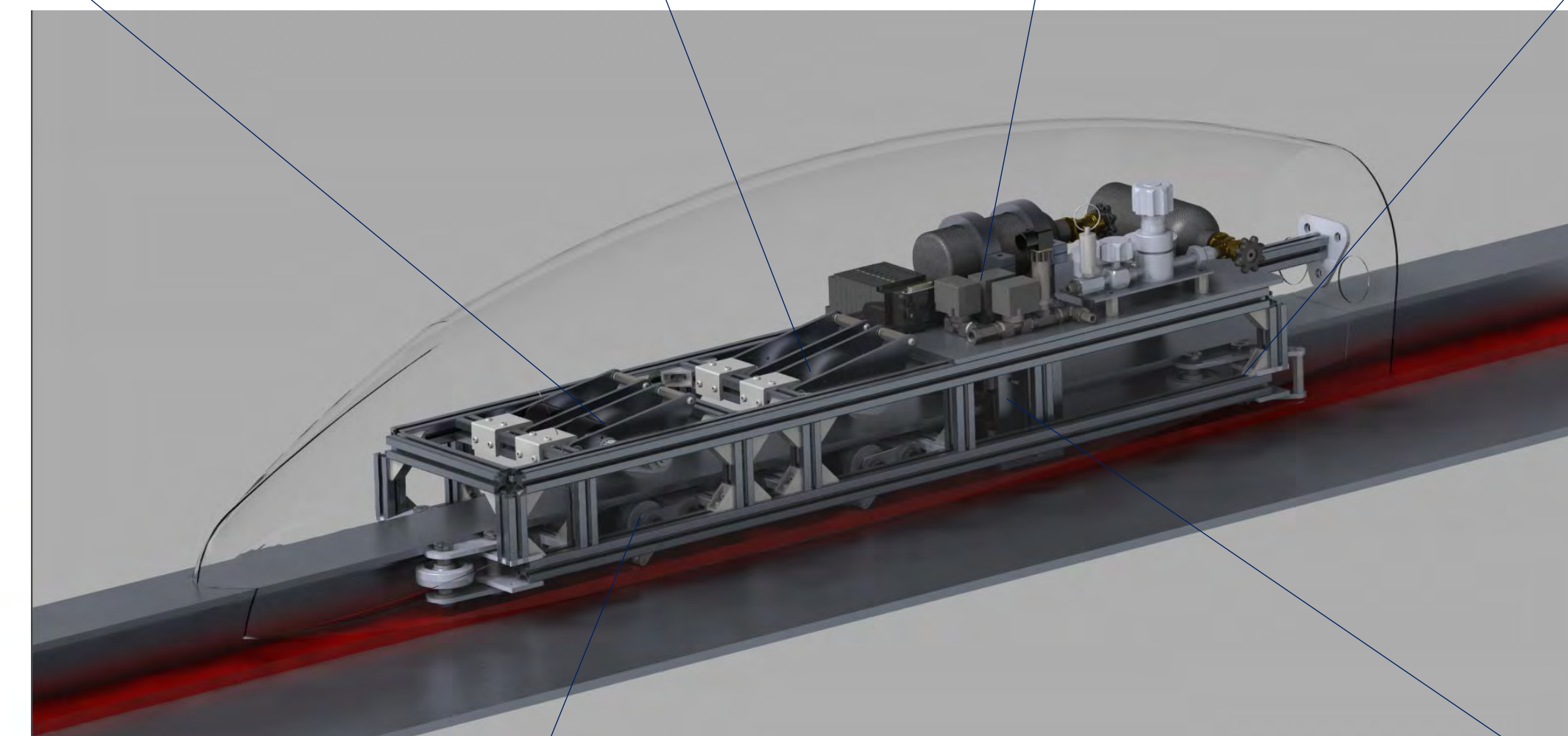
Topside Stabilization



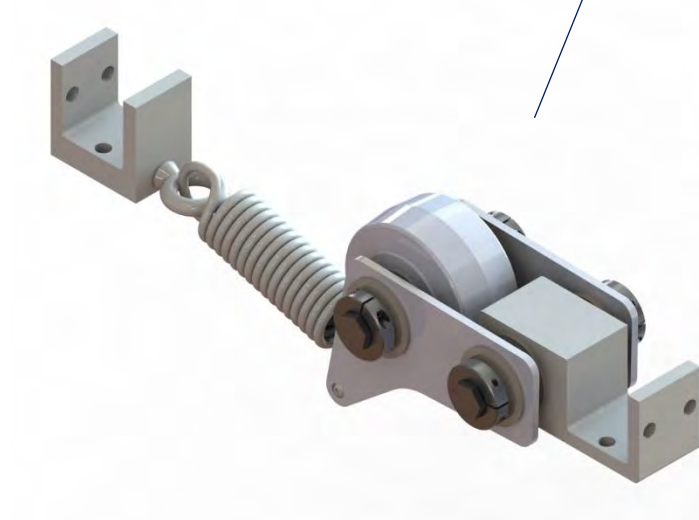
Pneumatics Assembly



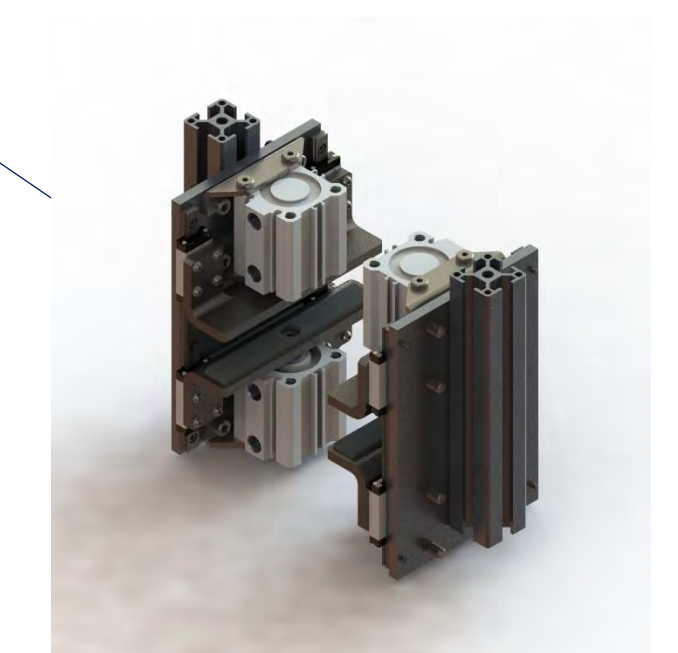
Lateral Stabilization



Chassis



Underside Stabilization



Braking Assembly

OUR ACHIEVEMENTS

