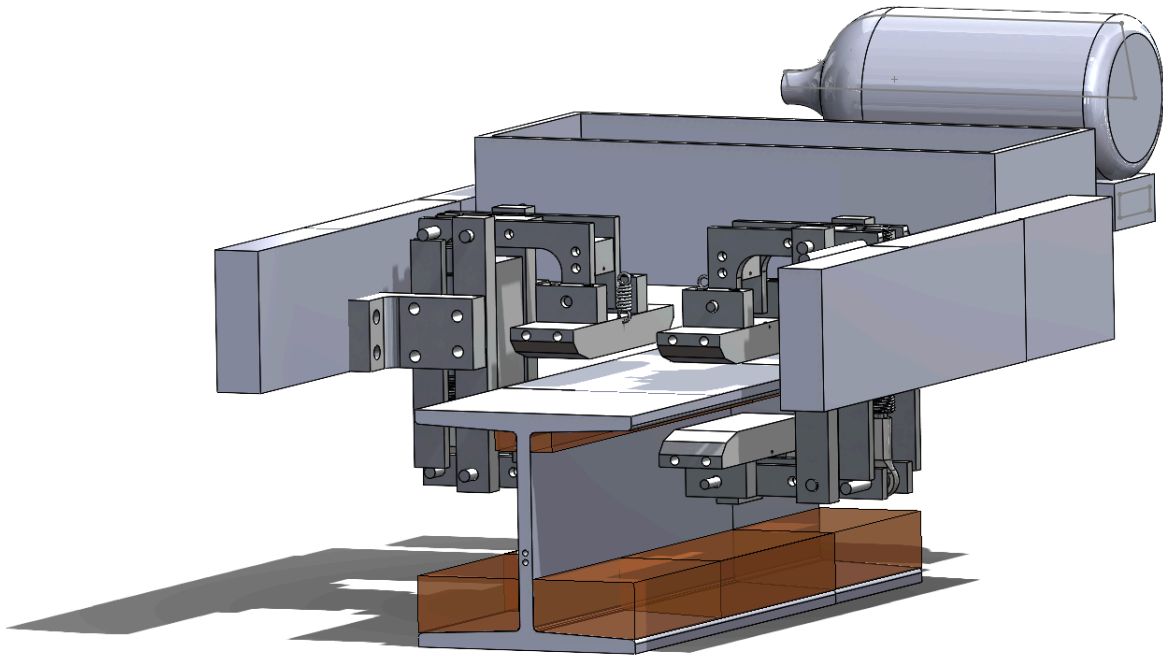
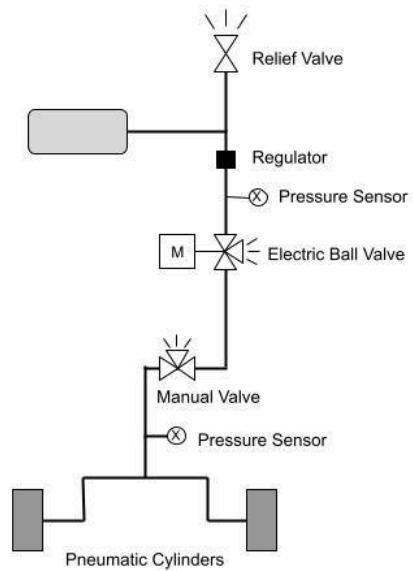


Hyperloop -

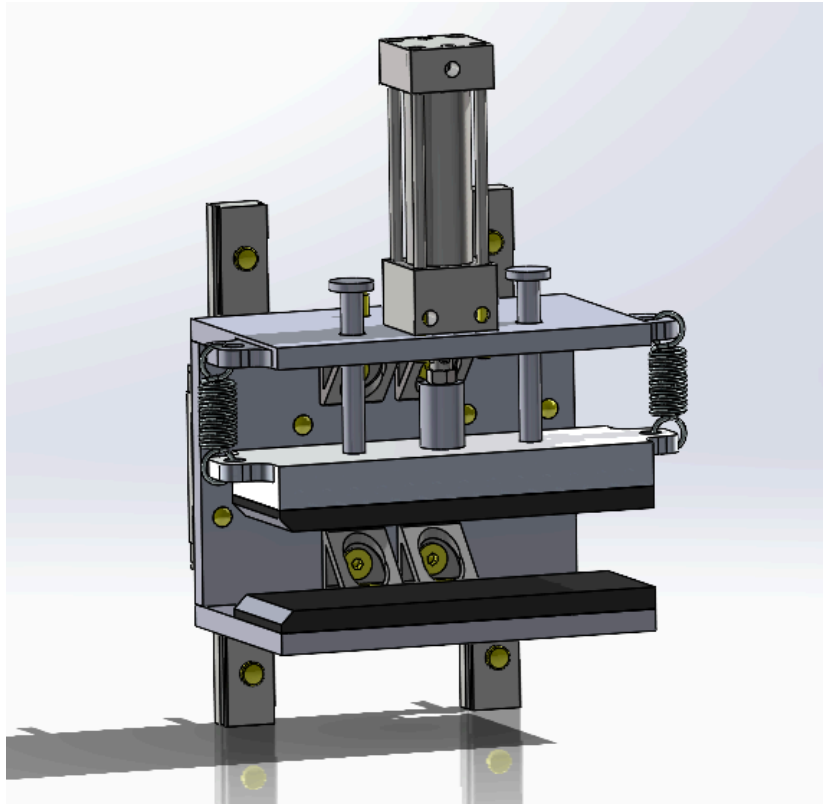
This is our old Hyperloop braking system design, which I helped to adjust and mount onto the pod as well as machine parts for and assemble last year:



It involved this pneumatic braking scheme which I designed and put together:

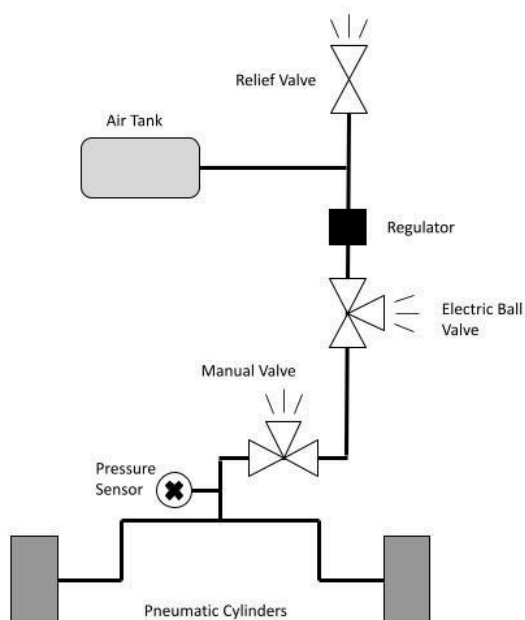


This year, we have designed a more compact, robust system for a fraction of the machining time and cost:



The above image shows one side of the brakes, for which we have finalized our design and will begin assembling shortly. I fully designed this new iteration and helped CAD it as well as overseeing execution and budgeting of materials as Braking lead.

Our new pneumatic system is slightly simplified as well:



Aside from cutting costs by over \$700, we were able to reduce weight by 20% and will likely improve our braking efficiency by an estimated 50% due to the functionality of the new design. We have detailed testing plans to follow in the coming quarter to ensure efficiency.