S.L.A.T.E

INTRODUCTION

Hi, we are the team behind the SLATE project, this project is part of the SCALED project. Our team consists of 2 structural design students, 2 mechanical engineering students, and our senior engineer Siddharth Ajaykumar.

Together we are part of the SCALED project, SCALED is a collaboration between the HAN and TU Eindhoven to develop self-driving trucks for industrial areas. The teams are currently working on the scale model (1:14) truck under SLATE and the systems to have a digital twin under SAVED.

JOURNEY & LEARNINGS

Our first challenge was to clearly define our goals, there were a lot of ideas for the redesign, but we needed to clearly define our scope. After that we defined our IPC's and got to work. There were some hiccups during the design and building phases that lead to some delays which made for some long days but we're on track to finish the project as we set out to do in our project plan.

The teamwork we have going on in our team is great, when someone has trouble finishing something, the rest of the team steps up to make sure it gets finished in time. We're confident that we will finish the project even with the delays we had.

OUTCOME & IMPACT

- We are providing an improved platform for the SAVED (software) team to build off. The main improvements are in ease of use and reliability of the truck. The new one is made to be more robust and serviceable, there are also new features including a trailer with steering and an actuated 5^{th} wheel.

  The SLATE project is a stepping stone, but it is a very important one for the development of self-driving trucks on industrial areas. Without hardware to test on, it is impossible to prove that your algorithms work because starting with full-scale trucks is expensive and risky.