

## Ben Martin '22

### Summer 2021

In the summer of 2021 I worked on the design of a testing setup to experimentally determine the braking characteristics of the Dartmouth Formula Racing team's current generation of brake system. I planned out experiments to determine kinetic and static coefficients of friction between the pads and rotors at various temperatures, thermal response of the brake system at different levels of energy dissipation, and long term wear characteristics. From these experiments, I scoped out components that would be required to build such a system, but due to procurement difficulties related to the pandemic, was never able to actually assemble the testing setup. The work done in the summer of 2021 was partially rolled into a project proposal for ENGS 89 and I planned to continue this work through the fall and winter terms, but due to a lack of interest from other students, the project wasn't accepted.