

## Journal 21

Throughout this past week, I worked on developing the YouTube functionality of my GUI. Namely, my goal is for the user to be able to enter a YouTube link into the GUI, download the video to a local server, display the first frame of the video on the GUI, and run my vehicle crash prediction algorithm on that YouTube video. In order to actually retrieve and download YouTube videos, I am currently utilizing the PyTube library. The GitHub link to this repository is <https://github.com/nficano/pytube>, and it offers a myriad of functionalities for the user.

I have currently integrated PyTube's API for retrieving a YouTube video as an mp4 file with my GUI. Specifically, when a user enters a YouTube link into the entry box in the top-right corner of my GUI and clicks the "Get Video" button, I have queried PyTube to download the video to my local computer. I will continue to improve this GUI-YouTube compatibility in the near future.

