

The main purpose of this project is to enable drivers to crowdsource pothole information in order to submit maintenance requests to the department of transportation. As such, this model would be best suited to be loaded onto an embedded system localized in the user's vehicle where video input, model classification, post processing, and output submission can be performed. As such, it makes sense to deploy my project as a API/CLI locally.

The codebase would be running on a lightweight system such as NVIDIA's Jetson Nano and interfacing with the dashcam and wifi receiver for I/O. Additionally, as a lightweight system, it can run solely off of power which minimizes the components needed.

Before starting to drive, the user would turn on the system and start accepting input; from there they could send a number of different commands to the system such as pausing collection, starting classification, uploading reports, etc.