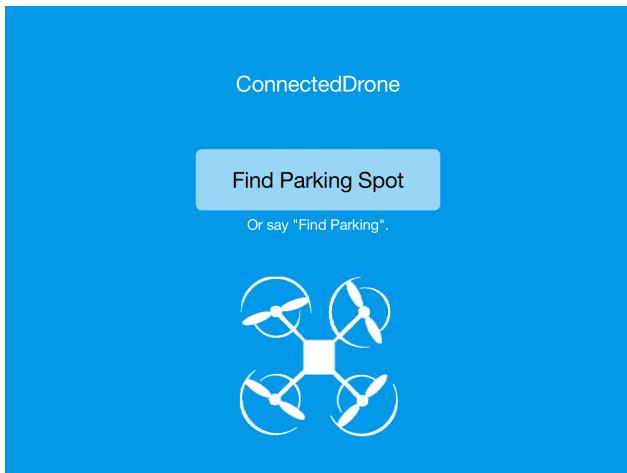


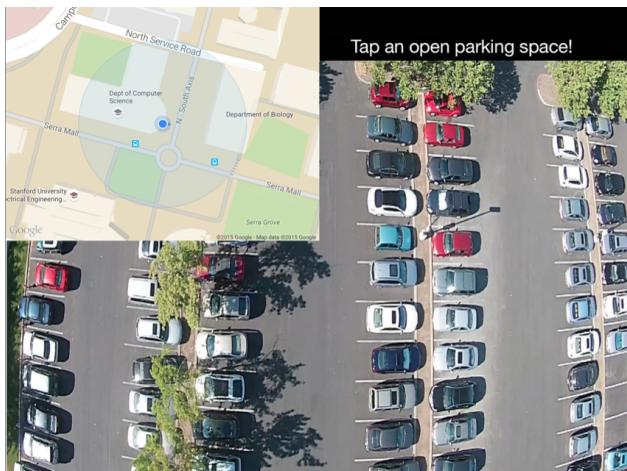
ConnectedDrone technical documentation overview

ConnectedDrone provides a platform for interacting with a DJI drone via an iOS app, for the purpose of helping drivers find parking.

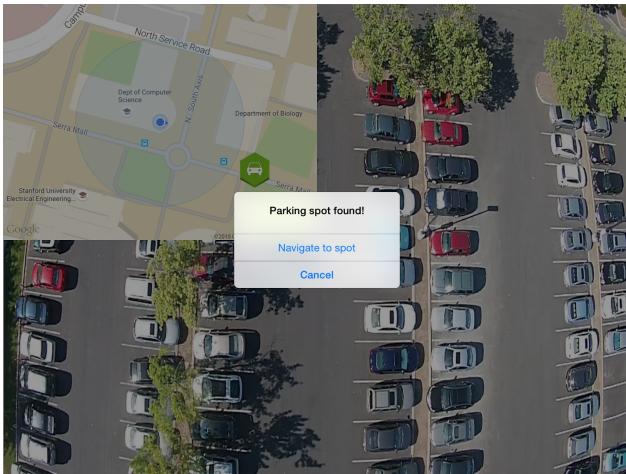
The overall flow of the app is shown below. For more detailed technical documentation, see cs210.github.io/bdw/. Source code is located at github.com/cs210/bdw.



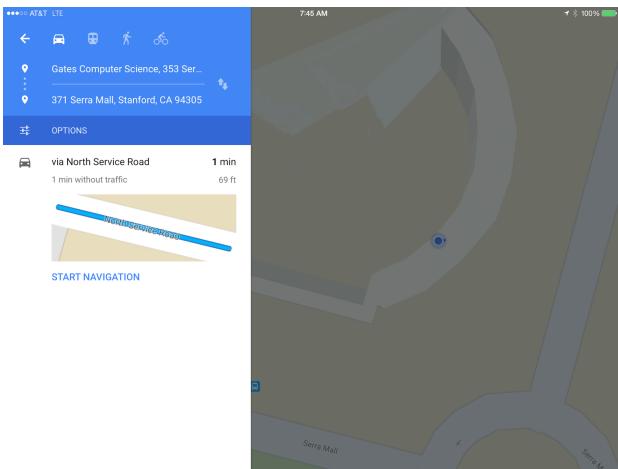
- IntroPageViewController displays intro page to user
- SpeechController recognizes the phrase “find parking”
- Segue to AerialViewController when user clicks “Find Parking Spot” or says “Find Parking”



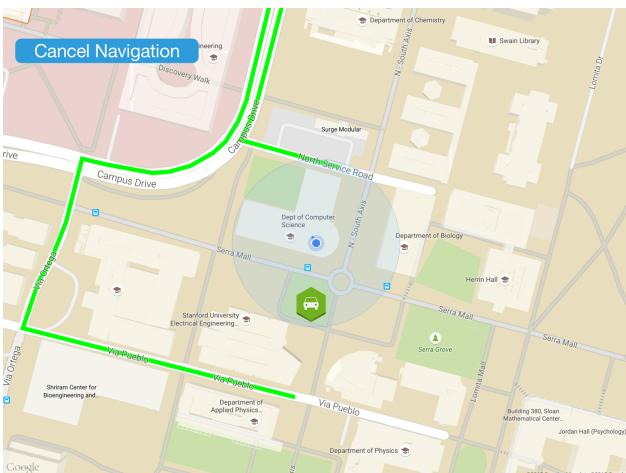
- AerialViewController displays combined map (GoogleMapsViewController) & live video feed (DJIViewController) view
- DJIDroneHelper connects to drone and collects its location, altitude, and yaw
- DJICameraViewController provides live video feed to AerialViewController
- TransparentTouchView detects user touches on video
- TransparentTouchView uses drone altitude and yaw to convert user touch into GPS coordinate



- A map annotation appears showing the user where their selected space is located.
- The user is asked for confirmation to navigate to the selected space.



- If the user has the Google Maps app installed on their device, the app is opened up to provide navigation to the selected parking spot.



- If the user does not have Google Maps installed, then AerialViewController uses the Google Directions API to find directions to the parking space.
- The route is displayed within an expanded GoogleMapsView.