Vehicle controls & KineticFlow™ visual neural network per-pixel distance map

Lane & object detection — calculated distance of first object in lane

Ego   30.6 m/s | 68.5 mph   Steering   1.7 deg   Throttle   15%   Braking   0%   Autonomy   SelfDriving
Human Input   None

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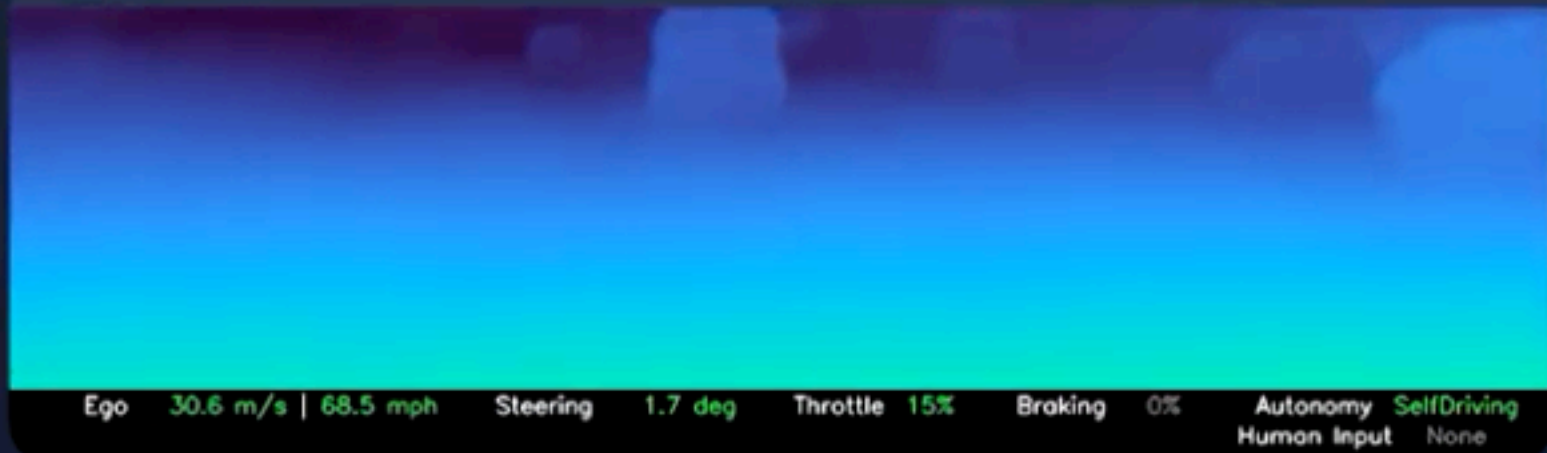
Ego   30.6 m/s | 68.5 mph   Steering   1.7 deg   Throttle   15%   Braking   0%   Autonomy   SelfDriving
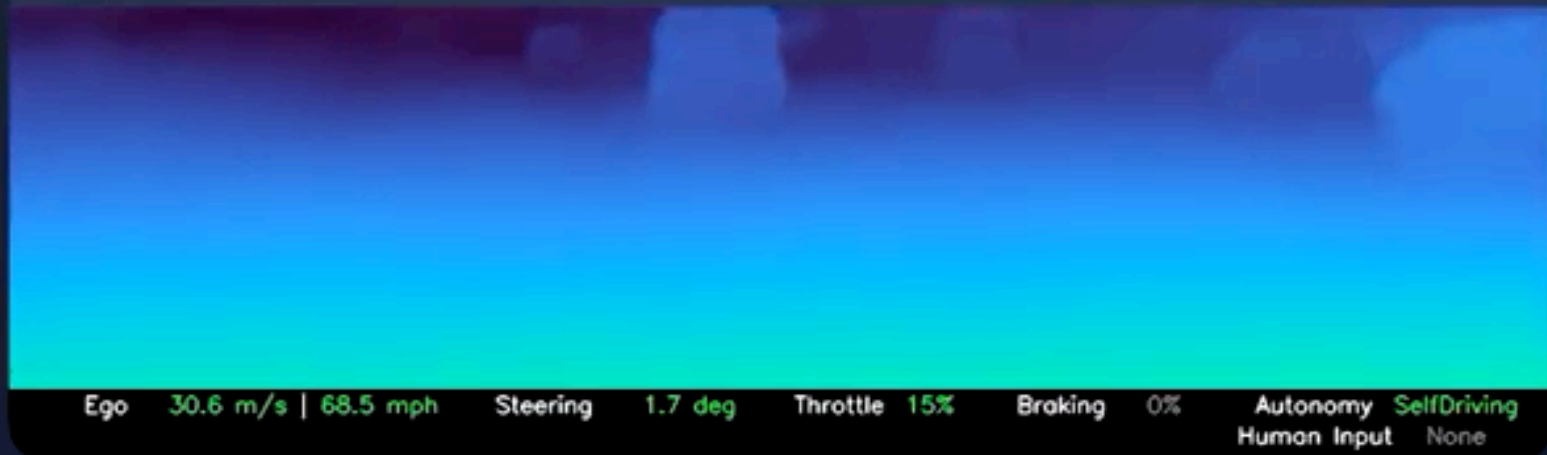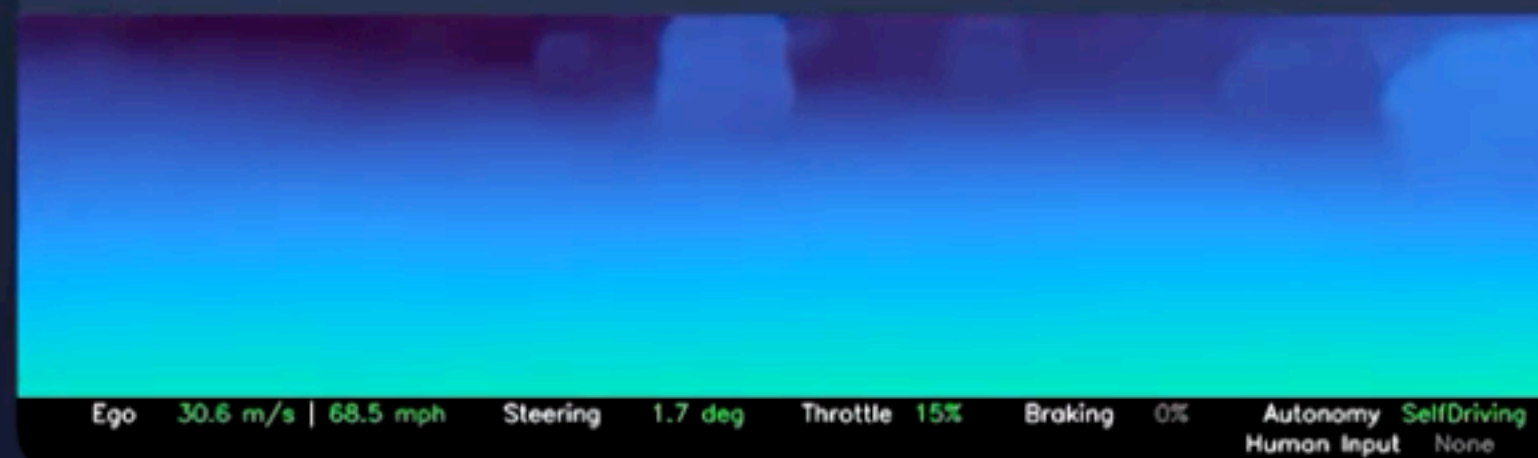   Human Input   None

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                                                                                          Human Input   None

(28, 0.1)
expn:-0.5

65m
60m
55m
50m
45m
40m
35m
30m
25m
20m
15m
10m

28.6m

I also used data that was rendered after the drive to better inform how we can push this information from post-facto to real time. This is a video pipeline I invented in Adobe AfterEffects that consumes a mix of JSON, Video and CSV files and renders a composite video.

As the scale of the in-vehicle experience grew, the overall UI began to offer more real estate and better ergonomics around expert tools. Internal and external users equally enjoyed seeing how the data flowed in our system, so making data visuals a first class citizen in the Ghost OS made sense.