Racing Human-Machine Interface

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Overview

Triton AI's autonomous racecar team requires a human-machine interface (HMI)

The HMI serves to control and monitor the autonomous vehicle (e.g. waiving a flag)

Problems We Encountered

Our first issue was that the car was situated in Hawaii

Sensor information we required was not available

Other Triton AI cars did not have the sensors we required for our app

Our Project (What We Did)

We created a web app as the HMI the pit crew can use to control and monitor their vehicle

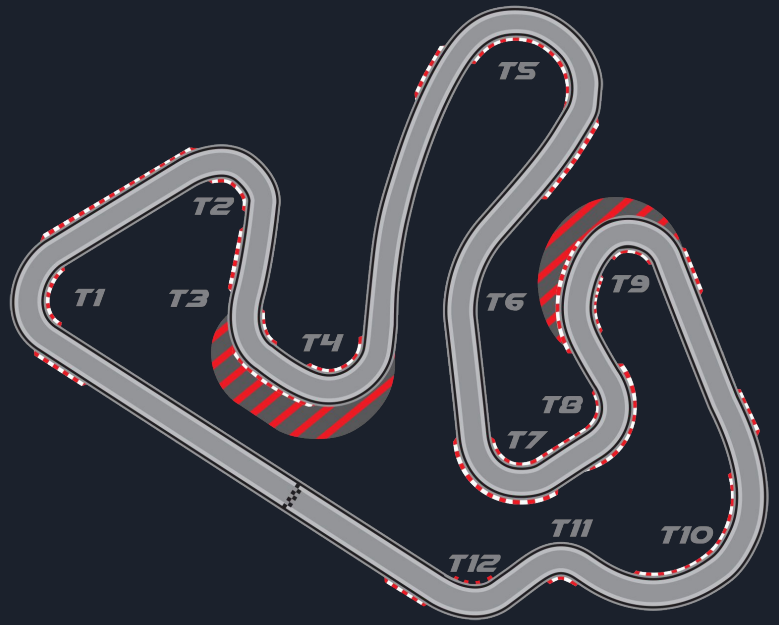
Our app receives data from sensors which monitor important parameters (speed, rpm, etc.)

Project Demo

Features Not Implemented

We did not have enough time to implement a GPS tracking system for the car

Real time tracking would keep a live location of the vehicle on the HMI



Conclusion

Our code will be hosted on GitHub where future members of Triton AI racing teams will be able to improve on our system

We hope that our app can also be used for other autonomous vehicles such as the Go-Karts

Q & A