

Centro GEO

Website / Facebook page (link):

<https://www.centrogeo.org.mx/>

Location:

Aguascalientes, a, Mexico

PROPOSAL TITLE (10 words)

Technological innovation for improving the road safety in Mexican cities.

EXECUTIVE SUMMARY (50 words)

Road security is one of the biggest issues people consider for their daily commutes, selecting the most secure mode of transport often has an environmental higher cost due to excessive car usage. Innovative technology for improving infrastructure evaluation can change the way we transport and use ITT's in mobility.

SOLUTION NARRATIVE (250 words)

There are 3 main problems in road intervention: infrastructure evaluation, data generation and systemic following of results. To address each part we'll develop different technologies specifically aimed at each step. The evaluation part consists in the development of an APP powered by a digital recognition algorithm that can analyze multiple pictures of the infrastructure to build intersection models usable for diagnosis. This info will be then analyzed to determine potential infrastructure risks and will be correlated with sinistrality rates gathered by local authorities and NGOs. Data analysis will be carried in several datasets including GIS information, surveys, and identification of road safety blackspots, a geoweb platform will be also created to access the data and to make it public accessible. Data generation will be addressed by selecting priority designing specific interventions and sensorizing them, 3 categories will be used: no intervention (control), physically signalized intervention based on priority order, and pedestrian priority intervention with light controlled signals. Intersection evaluation and effectiveness will be determined through several success indicators such as the reduction of conflicts between road users according to split mode, reduction of fatalities and injuries on intervened intersections, reduction of road accidents.