



Participated : 185 teams 

INAI Data Challenge

INAI Data Analytics challenge on road safety

Contest Ends in 17
Days07
Hours38
Mins42
Secs

View

Leaderboard

Submissions

Download Dataset

INAI Data Challenge

INAI is conducting a Data Analytics challenge on road safety, intended for students and the research community, in conjunction with the IRASTE-NXT Conference.

We at INAI have been involved in the iRASTE project, aimed at improving road safety through AI-based Advanced Driver Assistance Systems (ADAS). INAI has been instrumental in deploying the largest study of ADAS in India with over 450 vehicles.

This Challenge will provide participants with data on ADAS and DMS alerts. The participating teams should identify insightful patterns or problems from the data and propose possible solutions. The challenge is intended for students and research community, and open to national, and international participants.

What ?

The data provided in this Challenge are 1.8 million real-world events from 130 vehicles driven 24/7 over 30 days on city-roads and national highways.

The descriptions of the data fields (in the CSV files) are:

[Alert] Event from the advanced driver assistance system (ADAS) in vehicle; it could be from collision-alert system (CAS) or driver monitoring system (DMS)

[Date, Time] Date & time of the event

[Lat, Long] Geographical coordinates of the event

[Vehicle] Vehicle generating the event

[Speed] Speed of the vehicle during the event

The alerts and warnings given to driver by CAS are:

- (i) Forward Collision Warning - FCW,
- (ii) Pedestrian Collision Warning - PCW,
- (iii) Headway Monitoring and Warning - HMW, and
- (iv) Lane Departure Warning - LDW.

Similarly, the driver monitoring alerts are:

- (i) No seat belt,
- (ii) Smoking,
- (iii) On phone,
- (iv) Drowsy,
- (v) Asleep, and
- (vi) Distracted.

Related work (example insights)

<https://www.irjet.net/archives/V4/i3/IRJET-V4I3541.pdf>

<https://www.irjet.net/archives/V6/i5/IRJET-V6I5927.pdf>

How ?

To participate in this challenge, download the dataset given and:

Analyze the given large-scale, real-world data

Identify patterns, and problems related to road-safety

Suggest possible solutions based on the insights

Supplement with any additional data, for example with

Accident-prone (blackspot) locations

Hospitals, schools

Other road network information, etc.

Dates

Announced: 24-July-2023

Last date to register: 10-Aug-2023

Dataset available: 10-Aug-2023

Challenge period: 10-Aug to 15-Oct, 2023

Final submission due: **15-Oct-2023**

Results announced: 30-Oct-2023

Submission

Participants must submit a 3 page written submission on their insight with results, and upload as a PDF.

The report may contain the following:

Project title

Team/Author(s)

Date

Introduction

Related work (optional)

Methodology

Results – Data analysis with insights, patterns, maps etc. (from the given data)

Supplementary data sources (optional)

References (optional)

URL - results, code (optional)

The evaluation will be on three aspects:

Insight or pattern derived from the data (how interesting/valuable)

Methodology (how sound, techniques used)

Scalability (is it a point-solution, or can the methodology be used elsewhere)

Prizes - Cash Awards

INAI is sponsoring the following awards for the winners of the Challenge:

1st prize: INR 1,00,000 (approx. USD 1200)

2nd prize: INR 50,000 (approx. USD 600)

3rd prize: INR 25,000 (approx. USD 300)

To receive the cash awards, at least one participant in the team is required to have a bank account in India.

Only one submission per team. The decisions by INAI will be final.

Questions

For any questions, please email dac-help@inai.iiit.ac.in