

Formula 1 World Championship (1950 - 2023)

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RESEARCH TOPIC PROPOSALS

Formula 1, or F1, is the pinnacle of single-seater auto racing governed by the Fédération Internationale de l'Automobile (FIA). The FIA Formula One World Championship has been a premier global racing competition since its 1950 debut. "Formula" in the name denotes the standardized rules for participating cars. A Formula One season comprises Grands Prix races, held on custom-built circuits and public roads. This research evaluates the suitability of an F1 dataset for data mining, spanning 1950 to 2023, encompassing driver, constructor, qualifying, circuit, lap times, stops, and championship data.

SMART QUESTIONS:

- Utilizing supervised learning techniques and considering historical performance and attributes, predict the driver expected to secure the top position in the season's Driver's Championship.
- Can a driver's potential to excel in Formula 1 can be predicted considering past performance and team dynamics.

DATA SOURCE

The Formula 1 racing dataset for this research is sourced from Kaggle. The dataset contains information related to Formula 1 races ranging from 1950 to 2023 containing 14 csv files in total.

DATA SOURCE

<https://github.com/parv-bhargava/DataMiners>

METHODOLOGY

Our research leverages a Kaggle dataset with 14 CSV files, encompassing diverse Formula 1 data. We employ data collection, EDA, historical and performance analysis, geospatial insights, regulatory exploration, and anticipate contributions including historical and technological insights, performance guidance, regulatory input, and broader cultural and economic impact discussions, aiming to provide a comprehensive view of Formula 1's evolution