**Final Project Proposal**

**Group Name:** Sons of Analytical Anarchy

**Topic:** Calculate / predict probability of being involved in a Motorcycle Accident under certain key given condition inputs like city, weather, age, sex, time, alcohol consumption, riding experience etc.

Identify 3 key control elements that would mitigate risk of being involved in a fatal accident to a minimum.

**Sources:**

Available Public Database is comprehensive and detailed (government data). We can map specifics on street/cross section locations of the occurred accidents. There is detailed information on person/people involved in the accident and variables of weather, alcohol consumption and specific on time and day of the accidents all recorded in the database.

<https://www-fars.nhtsa.dot.gov/Vehicles/VehiclesMotorcycles.aspx>

<https://www.nhtsa.gov/node/97996/251>

<https://www-fars.nhtsa.dot.gov/common/FARS%20Encyclopedia%20Mapping%20Tool%20Features.pdf>

**Type of ML analysis:**

We’ll be looking: regression and clustering

**Potential models:**

Random forest, Decision Tree

**Visualization ideas:**

Plotly, Tableau, Leaflet

# accidents vs age group, vs. gender, vs. locations, etc