Hammer and Brocco Holdings

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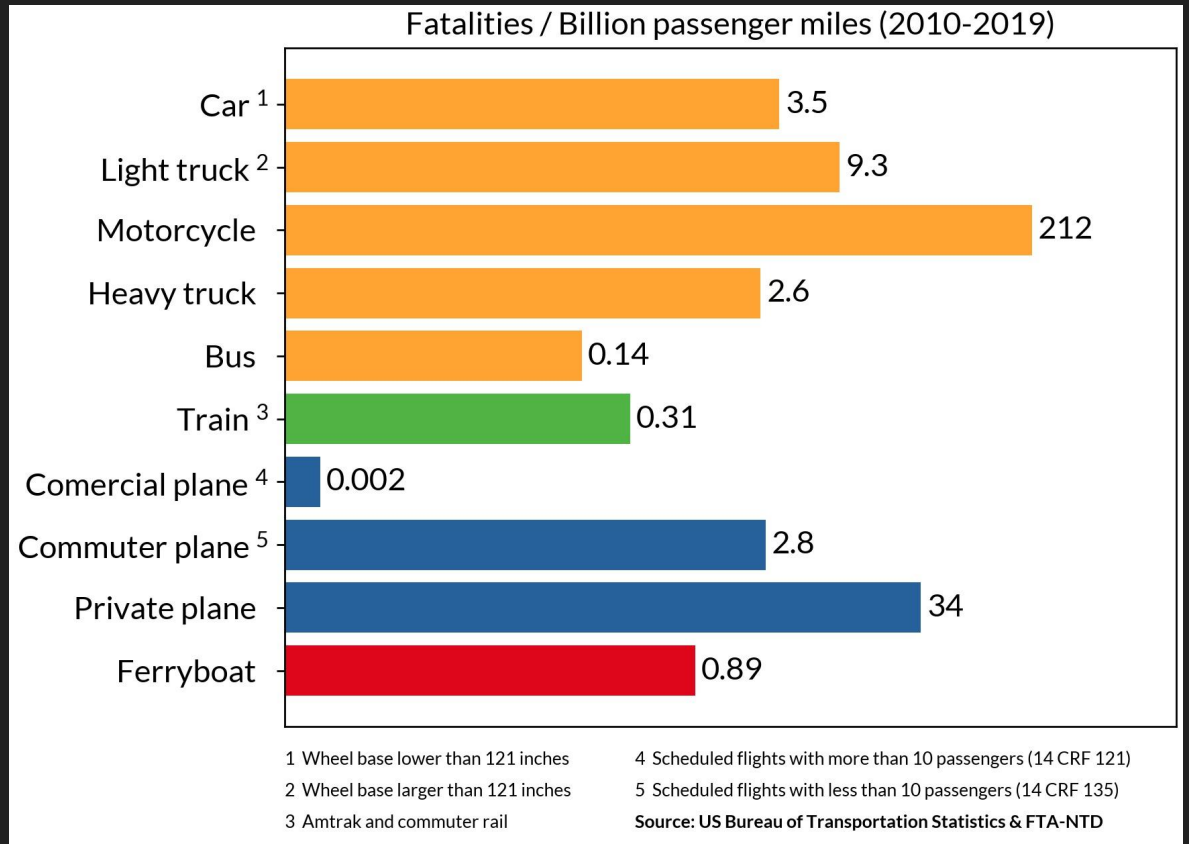
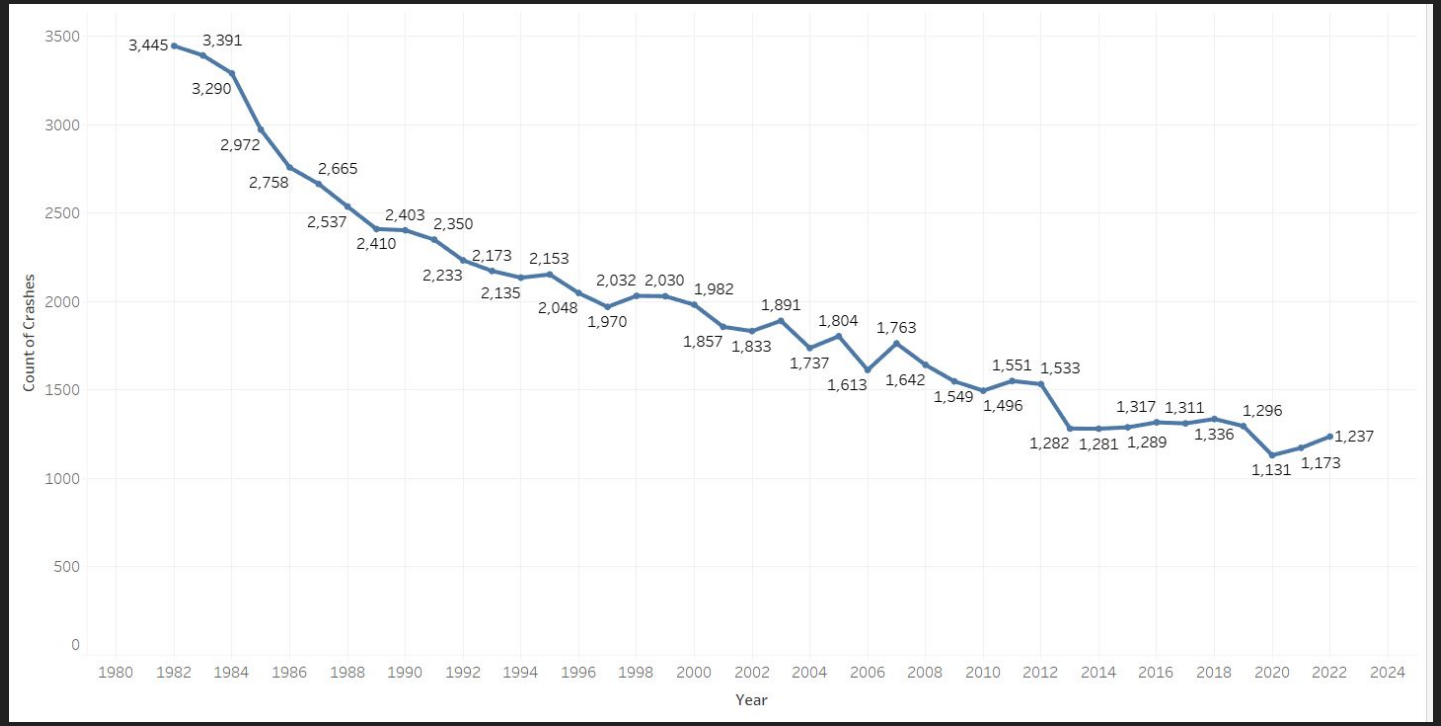
Business Background

- We (Anthony and Michael) attended the Flatiron School Data Science bootcamp and are planning to start a business after graduation
- We use a data dependent approach to decide which projects to pursue and have decided on starting a commercial airplane leasing company following this research
- The questions we will focus on include:
  - Age of airplane in the fleet
  - Month of year to concentrate flights
  - Day of week to concentrate flights
  - Pilot training target areas
- We used data that came from Kaggle "**Aviation Accident Database & Synopses, up to 2023**"
  - https://www.kaggle.com/datasets/khsamaha/aviation-accident-database-synopses
  - The shape of the dataset is 31 columns by 79899 rows

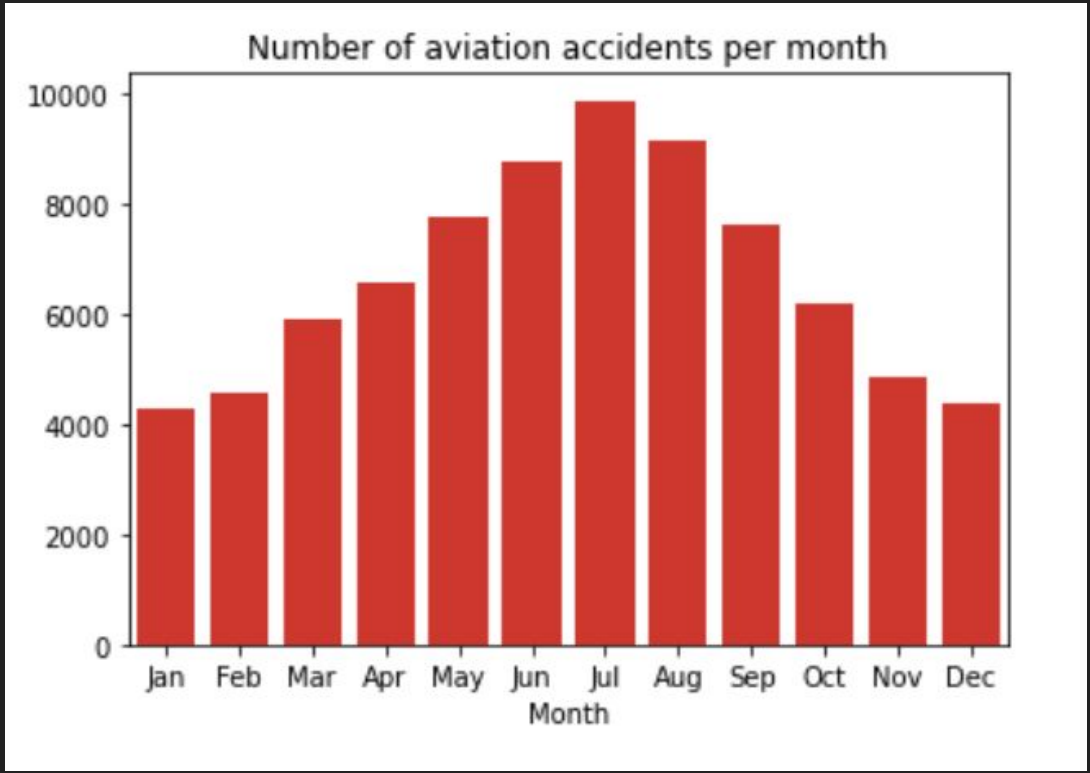
Airplane Safety - A Red Herring?



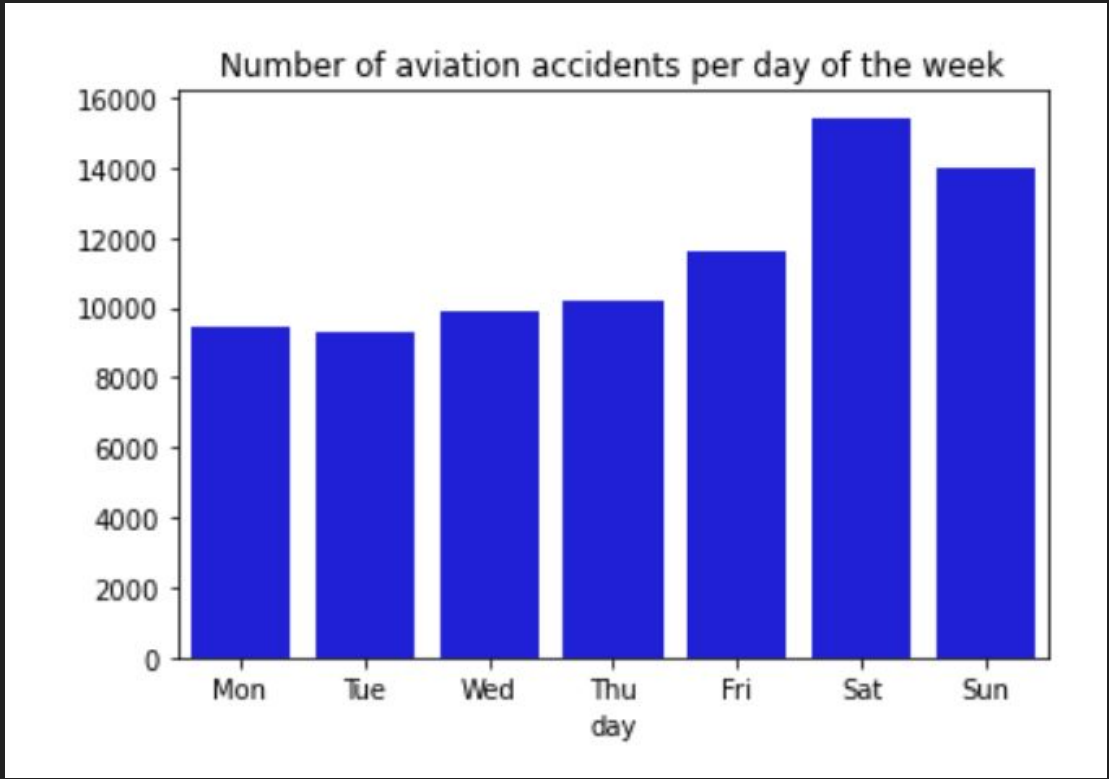
All Else Equal: Newer Airplanes



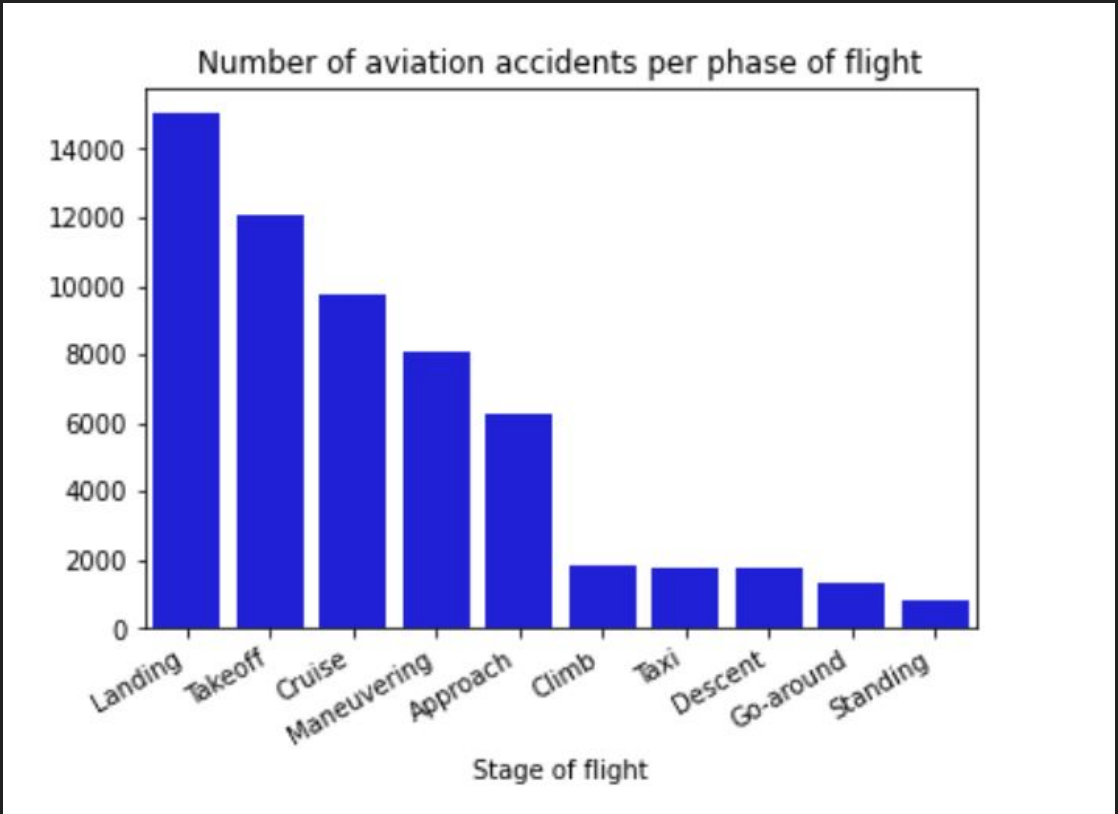
All Else Equal: Fly in Colder Months



All Else Equal: Fly on Weekdays



All Else Equal: Extra Pilot Training for Takeoff and Landing



Conclusions & Next Steps

- Conclusions
  - Operate commercial airplanes
  - Don’t fly in extreme heat
  - Avoid flight on weekends
  - Train pilots on takeoff / landing more
- Further investigations
  - Further data collection to calculate per capita injury rates on a per state basis
  - Incorporate costs of different planes and engine types to decide on the safest & most profitable planes to buy

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