

Predicting Falcon 9 First Stage Landing Success

Your Name

Your Institute

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Introduction and Business Problem

- Falcon 9 launches are marketed by SpaceX at a cost of 62 million dollars, considering the reusability of the rocket's first stage.
- Building the first stage of the rocket alone is speculated to exceed 15 million dollars, excluding costs for research and development or profit.
- Before the initial successful attempt in 2016, there were several preliminary trials at propulsive landing.
- There are instances when SpaceX decides not to reuse the first stage, based on various mission specifics like payload, orbit, and client requirements.
- The goal of this study is to develop a model that accurately predicts the chances of successful landing of the first stage rocket, which can be used as an indirect measure of launch cost.