



RaceSafe - Pre-Race Driver Analysis System

Proof of Concept Specification

Executive Summary

RaceSafe is an AI-powered driver behavior analysis system for iRacing that provides pre-race risk assessment and strategic guidance. The system analyzes historical driver data to predict aggressive/risky behavior patterns and provides actionable warnings to help drivers make strategic decisions about when to push and when to yield.

Target User: iRacing drivers focused on Safety Rating (SR) protection and consistent iRating growth, particularly in lower divisions where incident rates are higher.

Core Value Proposition: "Know who to race wheel-to-wheel with, and who to let go by."

Problem Statement

User Pain Points

1. **Unpredictable incidents:** Drivers get caught in incidents caused by aggressive/inexperienced competitors
2. **SR damage:** Single torpedo incident can wipe out multiple clean races worth of SR gains
3. **No pre-race intelligence:** Drivers enter races blind to competitor behavior patterns
4. **Wasted iRating opportunities:** Conservative racing when field is actually clean, or aggressive racing when field is risky

Specific Use Case (Real Example)

- Driver Dan: B license, 1.9 SR (close to demotion threshold at 2.0)
- Racing Mazda Rookie series, finishing P3-P5 consistently