



PRE-COMPETITION CHALLENGE DETAILS

11/02: Here is a sneak peak of the challenges to come!

Challenge 1 - Data Analytics

Formula 1 is one of the most competitive sports in the world. Engineers and technicians from every team use weather radar screens, provided by Ubimet to the teams, which allows them to track the current weather and make predictions during the race. Race engineers relay precise information to drivers, including:

- How many minutes until it starts raining
- Intensity of the rain
- Which corner will be hit first by the rain
- Duration of the rain

Points, and even races sometimes, are won and lost based on making sense of what the weather is going to do during a race, and being prepared as a team to act accordingly.

Therefore, weather forecasting takes a big part on the possible outcome of a race.

Similarly, F1 2021, the official Formula 1 videogame developed by Codemasters, uses a physics engine that behaves like the real world.

Challenge 2 - Augmented Reality

This challenge is all about bringing to life a concept that we started to explore. It's has all to do with what should be the next level Replay Experience. Think about any events that generate 3 dimensional data, and how those can be translated into impressive replays. Whether it is for eSports, Live action sport events etc.

We already have a working Swift/SwiftUI iPhone/iPad/Mac app, with a minimal user interface. The app connects to an Oracle Cloud API REST endpoint, where several individual F1 sessions are already recorded.

Challenge 3 - 3D Modelling

Metaverse is booming and it is about to create a whole new interaction paradigm. Since Metaverse is relying on 3d assets that usually take a bit of time to model manually, we believe that using data to programmatically create 3d assets will benefit whole industry going forward. Using AI to programmatic create 3d asset is not a new concept and there are many Research & Development papers applying AI for various use cases spanning across animations, shaders, sculpting or converting 2d images to 3d assets.