

Activision



Activision is an American video game publisher and consists of several subsidiary studios. Activision is one of the largest video game publishers in the world, having produced Call of Duty, Guitar Hero, World of Warcraft, Overwatch, and Candy Crush, among other games.

Project Description

The HDAG team will work on a machine learning project for player clustering based on Activision's user data within its Call of Duty mobile game. Currently, they have stable cluster analysis based on CoD franchise engagement, and Multiplayer mode preference/engagement. Other cohort definitions are mostly rule-based. In this project, they would like to explore cluster/segmentation analysis on more complex player behaviors, such as store content preference, engagement patterns, and spending patterns, etc.

Successful outcome of this project will help Activision to:

- Identify underserved player segments that we can focus our efforts on
- Find more useful and stable segmentation to be included in our player profile, like device category clusters

Internal Partners: Director of Data Science and Product Analytics, Activision Mobile

Datasets: Activision-provided micro (player-level) user data, with variables associated with player experience. Data wrangling will be necessary for creating variables for in-game player experiences.

Coding Languages: Python

Specific Skills

1. Data Management & Analytics: Wrangling, joining, reshaping data (management) and exploring, processing and deriving valuable insights from data (analytics)
2. Machine Learning: Using machine learning algorithms to gain insights into data.
3. Statistical Modeling: Perform data fitting analysis (Euclidean distance, k-means, spectral clustering, etc.) and model performance (goodness of fit, R^2 , etc.)

Expected Technical Difficulty: **Intermediate / Advanced**