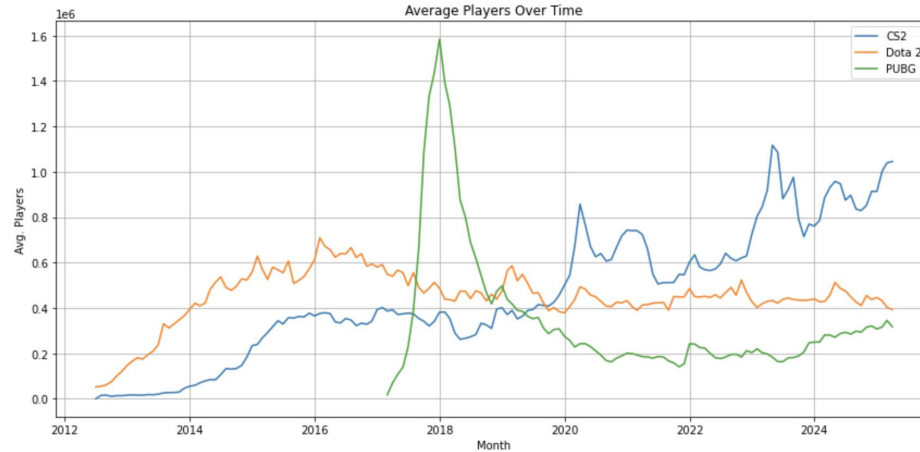

Forecasting Player Trends of Top Steam Games

Yuxin Zhang
STAT 418

Scraping the data

- The data was scraped from Steam Charts website (an ongoing analysis of Steam's concurrent players)
- I chose three popular games from steam which are Counter Strike 2, Dota2 and Pubg to capture diverse player behavior across genres (FPS, MOBA, Battle Royale)
- Using requests and BeautifulSoup from python to scrap the data with 407 observations
- Variables:
 - Avg.players - Average players counts
 - Gain - the increasing number of players comparing to last month
 - %Gain - increasing percentage of number of players comparing to last month
 - Peak players - the highest number of players during this month

Exploratory Data Analysis



- Check the plot and ADF test: Non stationary series
 - Using first order differencing to make it stationary

Proposal and plan

- Build separate ARIMA models for CS2, Dota 2, and PUBG to forecast monthly player counts
- Compare forecast trends across games to assess future popularity and player retention
- Try to add some external variables to improve accuracy