

ANNOUNCEMENT

BACHELOR THESIS

KEYWORDS

- Data Analysis
- Python
- Indie Games

TOPIC: ANALYZING THE PERFORMANCE OF INDIE GAMES

The gaming industry is growing every year. The estimated total worth of the industry in 2021 was \$178.73 Billion, 14.4% higher than 2020 (WePC, 2022). One of the reasons for this growth is the shift from physical copies of games (e.g., on CDs) to platforms that enable users to download games (Cheuque et al. 2019).

Steam is one of the biggest shareholders in the gaming platforms market, with more than 30,000 games in its library. While featuring big gaming companies, it also features products of independent developers and small companies in their portfolio. These games are called *indie games*. The increase in industry size also affected the number of indie game developers, causing more competition between those games. It is a big challenge for indie games to market themselves and to keep existing while making profit without the support of big company budgets.

The aim of this thesis thus is to analyze the performance of indie games over a time span of 9 years, from 2012 to 2021. The dataset includes the average number of players, number of players gained, and number of peak players for each month. In order to reach this aim, the student is expected to have solid exploratory data analysis (EDA) skills, to conduct statistical analyses, and to provide visualizations of the data. Supported by us, the student will need to make herself/himself familiar with the following Python packages: (a) numpy, (b) pandas, (c) statsmodel, (d) matplotlib and/or seaborn, and (e) scikit-learn.

LITERATURE & LINKS:

WePC (2022), "The Video Game Industry Statistics, Trends and Data in 2022" (last accessed at Feb 9th, 2022), [available at <https://www.wepc.com/news/video-game-statistics/>].

Cheuque G., Guzman J., Parra D. (2019), "Recommender Systems for Online Video Game Platforms: the Case of STEAM", WWW '19: Companion Proceedings of The 2019 World Wide Web Conference.

CompareCamp (2020), "75 Steam Statistics: 2020/2021 Facts, Market Share & Data Analysis" (last accessed at Feb 9th, 2022), [available at <https://comparecamp.com/steam-statistics/>]

Latorre, Ó. P. (2016). Indie or mainstream? Tensions and nuances between the alternative and the mainstream in indie games. Anàlisi

SUPERVISOR:

- Uğurcan Dündar: <https://www.wu.ac.at/en/imsm/about-us/team/ugurcan-duendar>
- Prof. Dr. Nadia Abou Nabout: <https://www.wu.ac.at/en/imsm/about-us/team/nadia-abou-nabout/>

APPLICATIONS:

Applications with CV and transcript of records should be sent to Uğurcan Dündar (ugurcan.duendar@wu.ac.at).