

# Game Data Piracy: How Players Abduct Data in Order to Transform their Gameplay Experiences

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## Extended Abstract

Capturing personal data has increased in virtually all areas of our society as it becomes easier to monitor our activities digitally using automatic telemetric systems found both online and within our physical surroundings (Baker, 2009; Solove, 2007). This fact holds true, as well, for monitoring and recording entertainment-based activities such as playing digital games. Most major game publishers and developers track players during gameplay and capture personal player data (Bell et al., 2011; Blackhurst, 2011; Zoeller, 2010). Sometimes this personal data is related to recording game purchases or a player's demographic information. Other times developers seek to capture a player's personal gameplay behavior, hoping to analyze the data in order to understand how players are experiencing a game. This means overtime game developers end up with large pools of data that describe how players are both purchasing and playing games, and developers attempt to leverage that data to support a game's development or support a game after it has launched.

One practice game developers employ to leverage their pools of player data is to disseminate that data back to players. Developers often produce online applications or systems to present a player's personal game data for players to investigate (Bungie LLC, 2010; CCP, 1997; S2 Games 2010). These online systems provide players with access to portions of their game data, which is usually aggregated and used to compare to other players (Lewis and Wardrip-Fruin, 2010; Medler, 2011). Player data presented through these systems may include achievements, high scores, in-game events, group affiliation, avatar summaries, etc. In other words, players are given access to data from their own gameplay that is automatically captured for them and is made part of the overall experience they have with the game through these additional data-driven online systems.

Players are, however, not always satisfied with the systems or data that is ultimately provided to them by game developers. Player data disseminated by a developer may be limited to simple statistics (such as a leaderboard) or may not exist at all, if a developer does not provide players with easy access to game data. In these cases, some players

take it upon themselves to build their own systems for capturing, presenting and analyzing their own game data. These systems include those built to:

- A) Repurpose data made available through a developer in different ways (Bell et al., 2011; Gerstmann and Davis, 2008).
- B) Tap into games during their run time in order to capture data locally or analyze data through processing data files like saved games (Sc2gears, 2010; Terraria Map Viewer, 2011; UOX3, 1996).
- C) Capture game data manually through crowd-sourcing or other methods (Huber, 2010; Krush DarkGod (alias) and Urme TheLegend (alias), 2009; Wowhead, 2006).

Although, like other participatory practices related to repurposing game-related data (e.g. game modding and machinima), repurposing or capturing data outside the scope of what game developers provide players may be in violation of End User License Agreements (EULAs) and other terms of service statements that many developers force players to agree to before playing a game. This means players who wish to reuse their own personal player data, or any type of game-related data, can be considered data pirates in the eyes of game developers, stealing or reverse engineering data without consent.

In this article the authors explore what it means to be a game data pirate and how players are abducting data from games in order to alter how they experience and play games. Modern piracy is often viewed as a practice where anonymous “pirates” copy and distribute intellectual property through physical means or online (Dames, 2009). Little attention is paid to the rising trend of how data captured for data analytic or tracking purposes is being copied and distributed in a similar fashion. In reference to games, data piracy is not simply an act of copying or distributing media but is an act where players abduct data, which the player typically had a hand in creating, to transform how they approach their gameplay. From “replay analyzers” that meticulously dissect a player’s gameplay (Sc2gears, 2010) to “content databases” that divulge every last bit of a game’s items and levels (Wowhead, 2006) players are continuously using data in novel ways, beyond what game developers provide. This article describes the novel ‘pirate’ systems that currently exist, speak with current players building these systems and discuss what these ‘pirate’ systems mean in terms of developing games in our increasingly data-driven society.

## **Keywords**

Data, Games, Piracy, Data visualization, Data analytics, Modding, Telemetry, Metrics.

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