Examining the Role of Networking in Games (Technical Report)

What is Responsible for Toxic Behavior in Online Games (STS Research Paper)

An Undergraduate Thesis Portfolio Presented to the Faculty of the School of Engineering and Applied Science In Partial Fulfillment of the Requirements for the Degree Bachelor of Science in Computer Science

by

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Preface

Playing online games can present challenges to players from a technical and cultural perspective. How can we go about improving the experience of online games?

The emergence of the World Wide Web made it more accessible for gamers to play video games over a network in the 1990s and 2000s. Today, many video games are designed with an online gameplay component. In the last decade, the eSports industry has started to see growth, and developers are seeing the potential in designing games targeted to more competitive players. It is important that game designers ensure a gameplay experience over the Internet that does not compromise their design choices. Delay-based networking techniques and rollback networking are analyzed to determine their impact on game design and the online gaming experience. Research is proposed to further study the impact of rollback networking on gameplay.

Some of the subcultures associated with online games are known to be aggressive, dysfunctional, and bigoted. As online games increase in popularity, more attention has been given on these subcultures and their impact on the online gaming experience. The stressful components of online games, problematic player types, and current efforts by game developers were accessed to understand what contributes to the toxic behavior in online games. This information can be useful to developers attempting to improve the online cultures of their respective games.

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