

# Individuals' Concern about Information Privacy in AR Mobile Games

Dapeng Liu

Virginia Commonwealth University, liud22@vcu.edu

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/ccerp>

 Part of the [Information Security Commons](#), [Management Information Systems Commons](#), and the [Technology and Innovation Commons](#)

---

Liu, Dapeng, "Individuals' Concern about Information Privacy in AR Mobile Games" (2016). *KSU Proceedings on Cybersecurity Education, Research and Practice*. 11.

<https://digitalcommons.kennesaw.edu/ccerp/2016/Student/11>

This Event is brought to you for free and open access by the Conferences, Workshops, and Lectures at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in KSU Proceedings on Cybersecurity Education, Research and Practice by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact [digitalcommons@kennesaw.edu](mailto:digitalcommons@kennesaw.edu).

---

**Abstract**

Augmented Reality (AR) proves to be an attractive technology in mobile games. While AR techniques energize mobile games, the privacy issue is raised to be discussed. Employing social media analytics (SMA) techniques, this research makes efforts to examine Twitter postings of "PokemonGo" case and explores individuals' attitudes toward privacy in AR games. In this research, we examine what are the privacy concerns of individuals in AR games and what are the individuals' sentiments toward privacy. In the interesting case of PokemonGo, this paper suggests that individuals' concerns about privacy are emphasized on six dimensions - collection, improper access, unauthorized secondary use, errors, post event reimbursement and proactive announcement. The findings could benefit AR game industry to identify privacy problem in discussion and to manage post privacy-event intervention.

**Keywords:** Information Privacy, Individuals' Concern, AR Games, Social Media Analytics

**Disciplines**

Information Security | Management Information Systems | Technology and Innovation

## Summary

Augmented Reality (AR) proves to be an attractive technology in mobile games. While AR techniques energize mobile games, the privacy issue is raised to be discussed. While big data presents to the web users the electronic social media such as Twitter, which provides information on human sentiments, attitudes, or concerns, this research employs social media analytics (SMA) techniques, examines Twitter postings of “PokemonGo” case and explores individuals’ attitudes toward privacy in AR games.

The purpose of the paper is to examine what are the privacy concerns of individuals in AR games and what are the individuals’ sentiments toward privacy. In the interesting case of PokemonGo, this paper suggests that individuals’ concerns about privacy are emphasized on six dimensions - collection, improper access, unauthorized secondary use, errors, post event reimbursement and proactive announcement.

Our results enhance our understanding of privacy concerns as previously identified. The findings could benefit AR game industry to identify privacy problem in discussion and to manage post privacy-event intervention. In this case, the results also suggest that while that PokemonGo has noticeable privacy problems, the public show very little emphasis on privacy and much more emphasis on the entertaining part of the game.