

Sim-Cyberpunk: Serious Play, Hackers and Capture the Flag Competitions

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Abstract

Capture the flag (CTF) is a style of game developed within the hacker community to simulate/emulate the practice of vulnerability research. In a CTF players identify security vulnerabilities in information systems and exploit these flaws to undermine their operations, which gives them access to a “flag” which they score for points used to win a competition. An exploratory study of this game, this dissertation uses ethnographic methods including observation of three CTF competitions and semi-structured interviews with 47 CTF players and designers. Analysis of this data considers the co-constitution of the game through practices of its designers and players, with respect to the values of the hacker community and its linkages to the information security industry whose membership constitutes the preponderance of CTF participants. Utilizing Sara Grimes and Andrew Feenberg’s (2009) theory of “games as sites of social rationalization” this paper argues that CTF has been instrumentalized as a tool of cultural reproduction. This function of CTF is used to discursively shape and sustain knowledge acquisition, identity formation and work in the cybersecurity industry through the affordances of play in alignment with hacker values, translating intellectual capital into social capital through playful game systems.