## Ben Falchuk. Selected Abstracts\*

[1] B.Falchuk, "How AI is Enabling a Creativity Renaissance", *Proc. Int'l. Conf. on Advances in Human-Computer Interaction* (ACHI'21), Nice, 2021.

**Abstract**: Artificial Intelligence has infiltrated many aspects of our lives, in both recognizable and invisible ways. Deep learning and sophisticated new information technologies allow the deployment of AI at massive scales, and media giants like Facebook and Google have whole-heartedly adopted AI to exploit their massive data-sets in the pursuit of their economic goals. Enterprise and consumer tools and apps are embracing these techniques too. But has this proliferation given users a breadth of creative aptitudes akin to – say - those of Leonardo da Vinci? In this paper we present a survey of impressive AI tools for creativity that provide users with profound new creative powers. We illustrate the sweeping breadth of potential for a human-AI creativity renaissance.

Full paper at ThinkMind™: http://www.thinkmind.org/index.php?view=article&articleid=achi\_2021\_3\_60\_20028

[2] B.Falchuk, S.Loeb, R.Neff, "The Social Metaverse: Battle for Privacy", IEEE Technology and Society Magazine, 37(2), pp. 52-61, June, 2018

Snippet: Nowadays, as virtual reality (VR) applications increase in popularity and fidelity they also threaten to erode our privacy in new ways ranging from knowing how we physically move around to the patterns of our neural activities [4]. In this article we focus on technology underpinnings that will help VR participants increase the degree of privacy while immersed in social VR, and builds on our past research in privacy and gaming analytics [14], [15]. Though coined quite some time ago, we use the term metaverse with the same semantics as in Wikipedia [16]: "a collective virtual shared space, created by the convergence of virtually enhanced physical reality and physically persistent virtual space, including the sum of all virtual worlds, augmented reality, and the Internet." We use the term social metaverse to describe the above sorts of virtual realities in which a central purpose is socialization and interaction with other avatars — including both players and non-player characters (NPC's). [...] We envision a new layer of controls that help tighten privacy in a metaverse where all avatars are essentially empowered by the same capabilities and act within the "rules of the game." Even with this assumption, however, significantly unethical, bothersome, and threatening behaviors might nonetheless still emerge. Consider that another avatar may: a) watch or follow you incessantly, b) monitor you from a distance, or c) harass you with its presence or utterances. The next sections address our approaches to mitigate these types of undesirable interactions.

Abstract at IEEE Xplore: https://ieeexplore.ieee.org/document/8371577

<sup>\*</sup>full-text of papers accessible through the respective publishers, or by request