# Chapter 10 Societal Implications of Wearable Technology: Interpreting "Trialability on the Run"

**Katina Michael** University of Wollongong, Australia

**Deniz Gokyer** University of Wollongong, Australia

Samer Abbas University of Wollongong, Australia

#### ABSTRACT

This chapter presents a set of scenarios involving the GoPro wearable Point of View (PoV) camera. The scenarios are meant to stimulate discussion about acceptable usage contexts with a focus on security and privacy. The chapter provides a wide array of examples of how overt wearable technologies are perceived and how they might/might not be welcomed into society. While the scenario is based at the University of Wollongong campus in Australia, the main implications derived from the fictitious events are useful in drawing out the predicted pros and cons of the technology. The scenarios are interpreted and the main thematic issues are drawn out and discussed. An in depth analysis takes place around the social implications, the moral and ethical problems associated with such technology, and possible future developments with respect to wearable devices.

DOI: 10.4018/978-1-5225-1016-1.ch010

Copyright ©2017, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

#### INTRODUCTION

This chapter presents the existing, as well as the potential future, implications of wearable computing. Essentially, the chapter builds on the scenarios presented in an *IEEE Consumer Electronics Magazine* article entitled: "Trialability on the Run" (Gokyer & Michael, 2015). In this chapter the scenarios are interpreted qualitatively using thick description and the implications arising from these are discussed using thematic analysis. The scenario analysis is conducted through deconstruction, in order to extract the main themes and to grant the reader a deeper understanding of the possible future implications of the widespread use of wearable technology. First, each of the scenarios is analyzed to draw out the positive and the negative aspects of wearable cameras. Second, the possible future implications stemming from each scenario context are discussed under the following thematic areas: privacy, security, society, anonymity, vulnerability, trust and liberty. Third, direct evidence is provided using the insights of other research studies to support the conclusions reached and to identify plausible future implications of wearable technologies, in particular use contexts in society at large.

The setting for the scenario is a closed-campus environment, (a large Australian University). Specific contexts such as a lecture theatre, restroom, café, bank, and library, are chosen to provide a breadth of use cases within which to analyze the respective social implications. The legal, regulatory, and policy-specific bounds of the study are taken from current laws, guidelines and normative behavior, and are used as signposts for what should, or should not, be acceptable practice. The outcomes illustrate that the use cases are not so easily interpretable, given the newness of the emerging technology of wearable computing, especially overt head-mounted cameras, that draw a great deal of attention from bystanders. Quite often resistance to the use of a head-mounted camera is opposed without qualified reasoning. "Are you recording me? Stop that please!" is a common response to audio-visual bodyworn recording technology in the public space by individuals (Michael & Michael, 2013). Yet companies such as Google have been able to use fleets of cars to gather imagery of homes and streets, with relatively little problem.

There are, indeed, laws that pertain to the misuse of surveillance devices without a warrant, to the unauthorized recording of someone else whether in a public or private space, and to voyeuristic crimes such as upskirting. While there are laws, such as the *Workplace Surveillance Act*, 2005 (NSW), asserting a set of rules for surveillance (watching from above), the law regarding sousveillance (watching from below) is less clear (Clarke, 2012). We found that, while public spaces like libraries and lecture theatres have clear policy guidelines to follow, the actual published policies, and the position taken by security staff, do not in fact negate the potential to indirectly record another. Several times, through informal questioning, we found 27 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/societal-implications-of-wearable-

technology/164311

# **Related Content**

## A Review on Wireless Communication Protocol and Security Privacy: Connectivity - UDP Protocols

K. S. Nirmala Bai (2019). International Journal of Wireless Networks and Broadband Technologies (pp. 11-17).

www.irma-international.org/article/a-review-on-wireless-communication-protocol-and-securityprivacy/243658

#### On BFSA Collision Resolution in LF, HF, and UHF RFID Networks

Varun Bhogal, Zornitza Genova Prodanoff, Sanjay P. Ahujaand Kenneth Martin (2015). *International Journal of Wireless Networks and Broadband Technologies (pp. 44-55).* 

www.irma-international.org/article/on-bfsa-collision-resolution-in-lf-hf-and-uhf-rfidnetworks/133998

#### Importance of Cloud Computing in 5G Radio Access Networks

Wael S. Afifi, Ali A. El-Moursy, Mohamed Saad, Salwa M. Nassarand Hadia M. El-Hennawy (2021). *Research Anthology on Developing and Optimizing 5G Networks and the Impact on Society (pp. 226-239).* 

www.irma-international.org/chapter/importance-of-cloud-computing-in-5g-radio-accessnetworks/270194

## Traffic-Based S-MAC: A Novel Scheduling Mechanism for Optimized Throughput in Mobile Peer-to-Peer Systems

Odysseas Shiakallis, Constandinos X. Mavromoustakis, George Mastorakis, Athina Bourdenaand Evangelos Pallis (2015). *International Journal of Wireless Networks and Broadband Technologies (pp. 62-80).* 

www.irma-international.org/article/traffic-based-s-mac/125819

# Caching Resource Sharing for Network Slicing in 5G Core Network: A Game Theoretic Approach

Qingmin Jia, RenChao Xie, Tao Huang, Jiang Liuand Yunjie Liu (2021). *Research Anthology on Developing and Optimizing 5G Networks and the Impact on Society (pp. 627-646).* 

www.irma-international.org/chapter/caching-resource-sharing-for-network-slicing-in-5g-corenetwork/270210