

# Usability and Security in Ubiquitous Computing

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Abstract: This paper addresses usability issues in the world of ubiquitous computing with regards to security, authorization, and privacy. Ubiquitous computing (or “The Internet of Things”) promises to connect everything—and everyone—to the Internet. In this paper, I argue that ubiquitous computing will initiate a paradigm shift in the way users interact with devices. Machine learning will advance to a state in which a device’s effectiveness is measured by its level of autonomy. As shared devices become more prevalent, authorization will simultaneously grow in importance. Current proposed methods of better authorization will harm the usability metrics of efficiency and satisfaction. No perfect method of authentication exists; however, it is necessary that a more secure and reliable method than text passwords be invented alongside the rise of ubiquitous computing.