

Propositions belonging to the dissertation:

SENSING THE CARE

ADVANCING UNOBTUSIVE SENSING SOLUTIONS TO SUPPORT INFORMAL CAREGIVERS OF OLDER ADULTS WITH COGNITIVE IMPAIRMENT

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1. Caregiving responsibilities are often viewed as burdensome. Therefore, adopting a constructive perspective that recognizes caregiving as an altruistic endeavor has the potential to cultivate compassion and empathy in the caregiving process. (General)
2. Unobtrusive sensing solutions utilizing Wi-Fi CSI hold potential for older adult care. However, alongside research focused on CSI-based human activity recognition, there is a need for parallel investigation into its implementation prospects, considering various end-use case scenarios. (Thesis, Chapter 2)
3. One significant limitation of Wi-Fi CSI is the issue of data mismatch, requiring advanced analysis to eliminate environmental noise and extract task-specific features. (Thesis, Chapter 3)
4. Wi-Fi CSI based HAR can also be utilized in diverse areas such as security services, industries, and shopping stores, each presenting unique privacy and security challenges. Thus, requiring comprehensive policies to ensure its responsible use. (General)
5. Artificial Intelligence (AI) serves as the backbone for modern-day eHealth solutions, potentially reducing the need for explainable AI in future. (General)
6. The concept of privacy in older adult care is nuanced and varies in relevance based on factors such as the care recipient's needs, the stage of their illness, the presence of co-morbidities, and the personal circumstances or preferences of caregivers. (Thesis, Chapter 5)
7. Personalized eHealth applications are more likely to be accepted by (in)formal caregivers, thereby increasing the likelihood of their seamless integration into overall healthcare infrastructure. (Thesis, Chapter 6)

8. Although advancements in science and technology enhances the comfort in human lives, they may concurrently impose constraints on cognitive abilities and mental well-being of human beings. (General)
9. To prepare for future pandemics like COVID-19, global collaboration in research for technological and policy advancements is crucial. Equally important is educating individuals for effective implementation and adherence to these measures. (General)
10. As cities become smarter, the surveillance of residents becomes more pronounced, necessitating a balance between technological innovation and prioritizing the needs and perspectives of residents—a resident-centric design and development approach. (General)