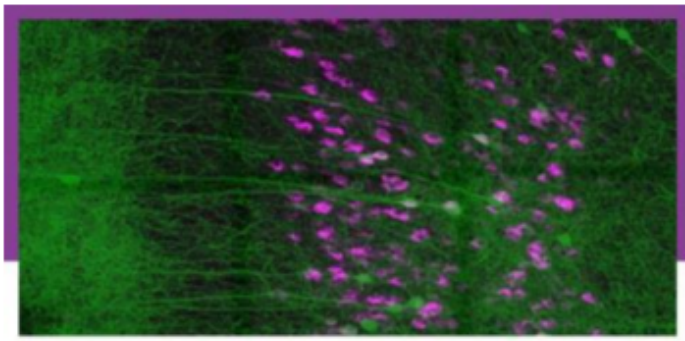

12° ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ
ΝΟΣΟΥ ALZHEIMER &
4° ΜΕΣΟΓΕΙΑΚΟ ΣΥΝΕΔΡΙΟ
ΝΕΥΡΟΕΚΦΥΛΙΣΤΙΚΩΝ ΝΟΣΗΜΑΤΩΝ
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ON ALZHEIMER'S DISEASE and
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ΠΡΑΚΤΙΚΑ ΣΥΝΕΔΡΙΟΥ
ΠΕΡΙΛΗΨΕΙΣ
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ABSTRACTS

EDITOR IN CHIEF: MAGDA TSOLAKI
ΕΠΙΜΕΛΕΙΑ:ΜΑΓΔΑ ΤΣΟΛΑΚΗ

Human Factors, Device Selection and Application Development for the RADAR-AD Study on Digital Biomarkers for Alzheimer's Disease

Abstract:

The RADAR-AD study (Remote Assessment in Disease and Relapse – Alzheimer's Disease - https://www.radar-ad.org/) aims to identify and evaluate digital biomarkers coming from wearables, smart home devices and applications, paired with intelligent analysis techniques in order to timely assess, predict and prevent the progression of Alzheimer's Disease (AD). The study is already taking place in several countries across Europe, leveraging different combinations of wearables, smart home devices and applications, in three different settings: during a lab assessment visit, independent living at home and a fully equipped digital smart home. In this framework, selecting the appropriate devices that are accepted by the patients and their caregivers but at the same time fulfil the technological requirements, proves to be a critical task. Therefore, the RADAR-AD study partners have identified both technological requirements, such as reliability, data types and format, transfer method etc., as well as human factors, polled from patient and caregiver representatives. Besides the devices selected, applications were also built to collect digital biomarkers for critical functional domains. One example is the Banking App, aimed to assess the ability to manage finances using an ATM simulation. While the study is progressing from use of wearables and applications to free living in the smart home setting, we present its setup as well as the methods to collect data collection and integrate it to the platform.

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