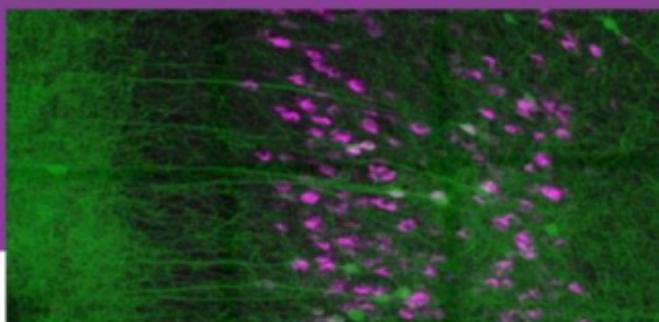




12^ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ
ΝΟΣΟΥ ALZHEIMER &
4^ο ΜΕΣΟΓΕΙΑΚΟ ΣΥΝΕΔΡΙΟ
ΝΕΥΡΟΕΚΦΥΛΙΣΤΙΚΩΝ ΝΟΣΗΜΑΤΩΝ
PICAD & MeCoND
18-21 Φεβρουαρίου 2021

12th PANHELLENIC CONFERENCE
ON ALZHEIMER'S DISEASE and
4th MEDITERRANEAN CONFERENCE
ON NEURODEGENERATIVE DISEASES
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ΠΡΑΚΤΙΚΑ ΣΥΝΕΔΡΙΟΥ
ΠΕΡΙΛΗΨΕΙΣ
CONFERENCE PROCEEDINGS
ABSTRACTS

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ΕΠΙΜΕΛΕΙΑ: ΜΑΓΔΑ ΤΣΟΛΑΚΗ

Support2LIVE: A System to Monitor and Support the Care of Dementia using Wearables

The support2LIVE system aims to provide intelligent data collection and analysis from wearable devices, to enable objective and reliable monitoring of people with dementia and, in turn, efficient, remote clinical decision support and self-management. The system monitors several aspects of life from a single commercial wearable smartwatch that provides physical activity data (number of steps taken, calories burned, distance travelled etc.), heart rate, sleep stages and duration. Artificial Intelligence (AI) techniques, such as ontologies (data models), rules and reasoning, are leveraged to store and to transform information into knowledge, clinically relevant to the disease, such as physical activity levels, sleep quality and health-related problems, such as insomnia, lack of sleep or exercise and stress. Applications allow healthcare professionals (HCPs) to visualize sensor data as well as interpretations, health-related problems detected by the system, behavioral patterns and trends. This way, HCPs are able to make timelier and effective decisions on interventions while monitoring their impact and progress. The end-users themselves and their caregivers are able to review the data using a smartphone or a tablet and reinforce their self-management and feeling of inclusion. So far, we have explored the requirements of end-users, caregivers and HCPs regarding the characteristics and the functionality of devices and applications they would like to use. The system was deployed in seventeen homes in Thessaloniki and Patras with optimistic results.

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Wearables

Sensors

Monitoring

Systems