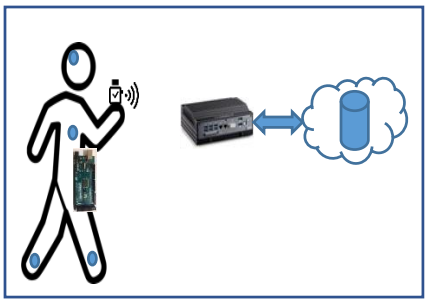
Kadir Has University-Artificial Intelligence for Health Research Group (KHAS-AI4H)

KHAS-AI4H is a **multidisciplinary** research group with members from engineering (Electrical, Computer, Industrial), bioinformatics and data science fields. We are focused on the application of computational intelligence algorithms for the development of smart solutions for the wellbeing of people. The group develops state of the art solutions using **machine learning** (statistical methods, neural networks, deep learning), **Big Data** processing, embedded **IoT** systems, and **optimization** for various problem domains such as **indoor/outdoor localization, anomaly detection, emergency response and disaster relief management.** Those activities are complemented by **hardware** (microcontrollers, wearable gadgets) and **software** (web and mobile) development. We believe that collaborations with our group can contribute substantially to the understanding of risks and to the development of **novel methods for effective prediction and prevention of those risks, in health and care systems with special emphasis on the problems of the aging society.**

The projects carried out by KHAS-AI4H members are funded by the Scientific and Technological Research Council of Turkey (TUBITAK) and by various industrial partners. Recent projects include "Self Learning from GSM Data," "Behavior Mapping with High Accuracy Indoor Positioning using UWB Sensors," "Determination of Efficient Vaccination Strategies for Influenza Type Epidemics," "Anomaly Detection in Walking Trajectory," "Digital Trace Data Driven Anomalous Link Detection."



Topics of Interest: We are looking for partners interested in the following H2020 calls: 1 - Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies - SC1-DTH-02-2020.2-International cooperation in smart living environments for ageing people - SC1-DTH-04-2020.3-Scaling up innovation for active and healthy ageing - SC1-HCC-08-2020

Role as a partner: We can contribute in the following areas or work packages for the following calls:

SC1-DTH-02-2020 call:

- Development of **innovative predictive models based on Big Data** for integrated health care:
- Development of **personalized early risk prediction systems, data collection and fusion system based on hardware and software components**
- Development of **digital solutions to increase health literacy**
- Development of **AI based cyber-security** solutions to take care of ethical and legal issues in **data protection, privacy and data security**.

SC1-DTH-04-2020 call:

- Development of **intelligent ICT platform for data collection and processing using Localization and anomaly detection** methods
- Development of **AI solution for the interpretation of user intention and interaction** by **identifying and modeling any abnormal patterns or emergency cases**.

Finally, we can contribute as a mHealth application developer for active and healthy ageing related to the call SC1-HCC-08-2020 (Scaling up innovation for active and healthy ageing).

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