







Zentralinstitut für Seelische Gesundheit Landesstifsung des öffentlichen Rechts

Heidelberger Kolloquium Medizinische Biometrie, Informatik und Epidemiologie

Sehr geehrte Damen und Herren,

hiermit laden wir Sie herzlich ein zu dem Vortrag:

"Validation of consumer-grade wearable devices for medical purposes"

von **Stephan Jonas** Fakultät für Informatik, Technische Universität München

am Montag, 18.11.2019, 16.15 Uhr

Im K13, Turm Süd Marsilius Arkaden, Im Neuenheimer Feld 130.2, 69120 Heidelberg

During the last decade, consumer-grade smart devices have seen a surge both in reach, as well as in computational power and sensor equipment. While most of this progress was made in the recreational sector, professional use of smart devices in industry and medicine is increasing likewise. At the same time, many attempts were made to create clinical hardware with the same design paradigms as their consumer-grade counterparts. However, usability, flexibility and price of these speciality devices are often less convincing. In addition, data collection by patients outside of medical facilities, such as smartwatch-based heart rate measurements, will become more and more important in the near future as this data will support diagnostics and decision making with more evidence. Especially medical professions working in sleep, heart rate and activity monitoring are already benefiting from an inflow of information never seen before. However, medical professionals need to be able to evaluate which sensor data to trust, especially if it was not recorded by a medical device. Thus, it is important to not only acknowledge the existence of consumer-grade hardware with clinical potential, but also to investigate the validity of information gained by those devices. Even though not each datapoint gathered by smartwatches or smartphones will be usable in a medical context, but evidence-based medicine can greatly benefit from everyday data gathered by consumer-grade devices.

Alle Interessenten sind herzlich eingeladen!

Gezeichnet: Dickhaus, Kieser, Knaup, Kopp-Schneider, Wellek

Organisation: Birgit Schleweis

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