University of
Zurich^UZH

URPP Dynamics of Healthy Aging & PhD Program Psychology

Workshop: Introduction to Using Smartphones and Social Sensing to Collect Behavioral Data in Psychological Science

2.-3. November 2017

Workshop leaders
Prof. Dr. Daniel Gatica-Perez, Adjunct Professor of Social Computing, EPFL Lausanne
Prof. Dr. Gabriella Harari, Assistant Professor of Communication, Stanford University

Content
Smartphones are sensor-rich, computationally powerful, and near constant companions to their owners, providing research psychologists with unparalleled access to people's behaviors as they unfold in their everyday lives. Smartphone can be used to capture behavioral data such as social interactions, daily activities and mobility patterns. Social sensing focuses specifically on the assessment of interpersonal behavior data such as verbal and nonverbal interaction behavior using smartphones, wearables, social media, or sensor-equipped environments. The workshop will discuss opportunities, practical considerations, and challenges of collecting behavioral data using smartphones and social sensing methods.

Day 1. Harari introduces the use of smartphones as a behavioral observation tool in psychological science. The aims are (1) to provide an overview of smartphone sensing methods, highlighting the breadth of behavior and fidelity of measurement that is possible; (2) to discuss the practical and technical considerations necessary for designing smartphone-sensing studies; and (3) to review the analytic techniques needed to examine sensor-based behavioral patterns over time.

Day 2. Gatica-Perez introduces a number of topics on social sensing, i.e., how to use today's sensors (smartphones, wearables, and social media) and machine learning to study behavior in everyday life. Topics are (1) how to use smartphone data to infer personality traits of users and to discover group affiliation in organizations; (2) how to use smartphones to capture snapshots of nightlife as experienced by youth; and (3) how to use social media data to characterize impressions of social video users and ambiance of urban places.

References

Harari, G. M., Lane, N. D., Wang, R., Crosier, B. S., Campbell, A. T., & Gosling, S. D. (2016). Using smartphone for collecting behavioral data in psychological science: Opportunities, practical considerations, and challenges. *Perspectives on Psychological Science, 11*, 838-854.

Schmid Mast, M., Gatica-Perez, D., Frauendorfer, D., Nguyen, L., & Choudhury, T. (2015). Social sensing for psychology automated interpersonal behavior assessment. *Current Directions in Psychological Science, 24*, 154-160.

Target group
PhD students (Psychology) and (postdoctoral) researchers

Course location
Room: 4 55/4 57 at Andreasstrasse 15

Course time
From 10.15 to 17.00

Registration
Please register with Monika Ohl, team doctorates, by email (doktoratskurse@psychologie.uzh.ch)

Organization
Prof. Dr. Mathias Allemand, Department of Psychology & URPP "Dynamics of Healthy Aging"
Dr. Marion Landis, Management Doctorates, Department of Psychology
URPP "Dynamics of Healthy Aging"