Call for papers
Personal and Ubiquitous Computing

Special issue
Supporting a Healthier Lifestyle with e-Coaching systems

Introduction
Since the appearance of Weizenbaum’s digital therapist ‘Eliza’, e-coaching systems have continued to advance in response to rapid changes in the digital world. With the introduction of sensor and mobile network technology, a broad range of applications and services have become available that help individuals develop and maintain a healthier lifestyle. Today over 100,000 health apps exist that support all types of health related activities ranging from choosing healthy foods to improving sleep quality, but the usefulness and effectiveness of these apps is often unclear. Emerging knowledge and technology provides the basis for developing therapies and coaching principles in smartphones (and other mobile devices) that go far beyond the capabilities of Weizenbaum’s Eliza, but the design of these systems should be preceded by careful analysis and evaluation of the behavior changing techniques and the coaching process.

E-coaches can be powerfully influential, and this highlights the need for new insights into the ethics and psychology of persuasion, as well as the dynamics of human-computer interactions. The current special issue will focus specifically on e-coaching systems for supporting the development of healthier lifestyles. Situated at the crossroads of research on health psychology, human-computer interaction, artificial intelligence and ethics, this research area is of importance to understanding fundamental scientific issues of behavior change through technological systems, as well as crucial for developing innovations highly needed in society.

Aim
This special issue focuses on the topic of e-coaching systems supporting healthy changes in lifestyle. The goal is to explore the design, implementation and evaluation of these systems and to deliver insights to their designers and researchers. Challenges are to understand how to efficiently, effectively, and ethically implement behavior change strategies.

Scope
The guest editors seek submissions with an original perspective on the topics proposed below and related issues. Within the context of e-coaching for lifestyle improvement, novel and original papers can include, but are not limited, to the following:

- Comprehensive state-of-the-art reviews that present an integrated view of the e-coach practices
- Technology: sensor measurement, architecture and implementation, networking, ubiquitous computing, …
- Data processing and analysis: big data, sensor data, managing inconsistent data from various sources, …
- Functionality: monitoring, task scheduling, ecological momentary assessment, …
- Generic design: interaction principles, goal setting, ontologies, …
- Persuasive strategies: adaptation, tailoring, motivational support, …
- Specialized domains: nutrition, physical activity, sleep, stress & relaxation, procrastination, …
- Implementation of therapeutic techniques in e-coaching
- Methodological issues: scenario’s, ecological design, generic design, interaction, coaching trajectories, scheduling, …
- Testing and validation: simulation and experimental design, RCT’s for mobile systems, performance measurement, …
- Societal embedding, impact and target groups, economic implications, …
- Network society: organizational models, holistic approaches, …
- Gaming: coach in gaming, gaming as a persuasive strategy, …
- Ethical implications: transparency, autonomy, privacy, self-image, reliability, trust, …
- Legal and policy implications: legal accountability, equality of health care access, nudging, insurance discounts for e-coaching use
Guest editors
Authors with questions about the suitability of proposed topics for this special issue are encouraged to contact the guest editors.

- Dr. ir. Robbert Jan Beun (r.j.beun@uu.nl) Utrecht University
- Dr. Joel Anderson (j.h.anderson@uu.nl) Utrecht University
- Dr. Jaap Ham (j.r.c.ham@tue.nl) Eindhoven University of Technology
- Dr. Michel Klein (michel.klein@vu.nl) Vrije Universiteit Amsterdam
- Dr. Anne Roefs (a.roefs@maastrichtuniversity.nl) Maastricht University
- Prof. Dr. Joyce Westerink (joyce.westerink@philips.com) Philips Research and Eindhoven University of Technology

Deadlines and Submission Instructions
Papers will be reviewed following the regular Personal and Ubiquitous Computing (PUC) review process. All submissions should meet the instructions for authors by PUC www.springer.com/computer/hci/journal/779. The deadline for the submission of full manuscripts is May, 1, 2016. Send your paper by email to Robbert Jan Beun r.j.beun@uu.nl include ‘e-coaching special’ in the topic of your e-mail. Authors should consult the website for details on formatting their submissions. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere.