

22nd International Conference on Human-Computer Interaction Bella Center, Copenhagen, Denmark 19 - 24 July 2020

http://2020.hci.international/

## **ADVANCE CALL FOR PARTICIPATION**

### **DAPI 2020**

# 8th International Conference on Distributed, Ambient and Pervasive Interactions

Jointly held under one management and one registration with HCI International 2020

Chairs: Norbert Streitz and Shin'ichi Konomi

The 8th International Conference on Distributed, Ambient and Pervasive Interactions (DAPI), an affiliated conference of the HCI International 2020 Conference, provides a forum for interaction and exchanges among researchers, academics, and practitioners in the field of HCI for DAPI environments. The DAPI conference addresses design approaches for DAPI-Environments, information, Interaction and user experience design for DAPI-Environments, enabling technologies, methods and platforms, and application areas. The related topics include, but are not limited to:

## Objectives and Design Approaches for DAPI-Environments

- O Citizen-Centered Design
- O Challenges of Adaptive and Responsive Environments
- O Cognitive Ergonomics
- O Design Principles and Guidelines
- O Design Trade-offs (e.g., Human Control vs. Automation)
- O Human-/People-Centered Design
- Humane and Sociable Cities
- O Impact of Ambient Intelligence and IoT on Society
- O Multiple Dimensions of Requirements
- Participatory Design
- O Privacy and Trust Issues in Ambient Intelligence Systems
- O Reconciling Humans and Technology
- O Security in Ambient Intelligence Systems
- Sensory Emotional Values (Aesthetics)
- O Social Issues in Ambient Intelligent Environments
- Values and Goals
- O Ethically Aligned Design of Algorithms and Autonomous Systems

## Information/Interaction/Experience Design for DAPI-Environments

- Crowd- and Swarm-based Interaction
- O Embedded and Embodied Interaction
- O Implicit versus Explicit Interaction
- O Interaction Issues in Hybrid Environments
- Multimodal and Multisensory Interaction
- Natural Interaction
- O Space-Time Dispersed Interaction
- O Symmetric Interaction in Real and Virtual Worlds
- Tangible Interaction

- Urban Interaction
- O User Experience of Privacy and Trust

## Enabling Technologies, Methods and Platforms for DAPI-Environments

- Ambient and Pervasive Displays
- O Architectures for Emergent and Collective Ambient Intelligence
- Combining Multiple Devices and Multiple Users
- Combining Multiple Sensor Modalities
- Modelling Context Awareness
- O Evaluation Methods and Techniques
- Field Studies and Deployments
- Human Activity Modelling
- O Indoor vs. Outdoor Tracking
- Instrumented Environments
- Interactive, Smart Materials and Physical Computing
- Internet of Things (IoT)
- Living Labs, Context Laboratories, and Experiential Landscapes
- O Machine Learning and Artificial Intelligence in Smart Environments
- Sensors and Actuators with their Dependencies
- Sensor Data: Reliability and Quality
- O Data Science in Pervasive Environments
- O Self-organization in Socially Aware Ambient Systems
- Social Interfaces
- Spatial and Embodied Smartness
- Wearable Computing

#### Application Areas of DAPI-Environments

- Affective Computing
- Ambient Assisted Living (AAL)
- Ambient Games
- Civic Computing
- O Connected Cars and Automated Driving
- Connected Cities
- Education and Learning
- Environmental Sensing
- O Groupware and Multi-User Ambient Environments
- O Healthcare and Well-being
- Hybrid Cities
- O Immersive Entertainment Environments
- O Industrial Internet / Industry 4.0
- IoT and Logistics
- Lifelogging and Personal Informatics
- Location-based Smart Services
- Media Façades and Media Architectures
- Personal Health and Tele-Monitoring
- O Pervasive Games in Hybrid/Augmented Worlds
- Product Memory, Transparency and Consumer Information
- O Public Transient Smart Spaces
- Smart Airports
- Smart Artifacts in Smart Environments
- Smart Cities
- Smart Farming
- Smart Landscapes
- Smart Learning Ecosystems
- O Sustainability and Fair Trade
- Urban Media Art
- Urban Computing

Conference proceedings published by

