

# Preface to the 7<sup>th</sup> International Workshop on Personalizing Persuasive Technologies (PPT 2024)

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## 1. Introduction

There is empirical evidence that persuasive technologies are more effective in achieving a change in attitude or behavior when they are personalized to individuals or groups of similar people [1]–[3]. The area of personalizing persuasive technologies (PPT) has seen a significant growth in the last decade. Several approaches have been adopted to personalize persuasive technologies. For example, demographic factors – such as personality traits as personality type [4]–[6], gamer type [7], [8], culture [9], age [10], and gender [11] – have been used substantially. These factors have been applied in various domains such as e-commerce [12], [13], fitness [14], and health [15].

In spite of these advances, there is still further work required to advance the field of PPT. For example, there is still a scarcity of research on AI-based personalization and long-term impact. As a result, there is a need for more research on dynamic and data-driven approaches to PPT, which take advantage of machine learning and AI. More importantly, there is a scarcity of standard ethical frameworks for personalizing persuasive technologies [16]. Moreover, novel strategies and approaches to make personalized persuasive technologies (more) trustworthy to increase adoption are under-researched. In the light of these research gaps, this workshop aims to provide a platform where people in industry and academia interested or experienced in the domain of PPT can engage in open discussions around these topics while networking and deliberating on ways to move the field forward.

The 2024 workshop, held in conjunction with the International Workshop on Data Design Education and Practice (DDEP 2024) [17], built on the achievements of the previous workshops by advancing personalization research and discussing ways to address outstanding challenges in the field.

## 2. Previous PPT Workshops

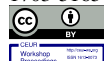
The PPT workshop has been held successfully six times in the past under the auspices of the International Conference on Persuasive Technology. The first edition [18] was held in 2016 in Salzburg, Austria as a full-day workshop. It attracted over 30 participants and sixteen paper presentations. Subsequent editions [19], [20], [21], [22] have seen varying numbers of participants and presentations. The workshops provided attendees a great opportunity to network and discuss pertinent topics in the area. They have recorded a good number of peer-reviewed publications on a broad range of topics in several domains such as eHealth, eCommerce, eLearning, Mobility, Social Network, Personalized Games and Gamification [18], [19], [23]. At the workshops, various personalization topics relating to methods, theories, models, evaluation, systems, to mention a few, were presented [21], [24]–[26]. The corresponding papers of the presented work, compiled as proceedings, are archived at CEUR-WS.org.

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CEUR Workshop Proceedings (CEUR-WS.org)

### 3. Accepted Papers

This year's workshop was hybrid in nature, i.e., it was both in-person and virtual. Two papers were accepted and presented. Each paper underwent a double-blind review process and received two evaluations.

The first accepted paper is titled “*Investigating Gender-Specific Preferences for Persuasive Strategies in a Persuasive Game for Healthy Eating*” [17]. In this paper, the authors advance research in personalizing persuasive technologies in games for healthy eating by comparing the perceived effectiveness of persuasive strategies between males and females in a Pacman game for healthy eating. The authors conducted a study of 124 participants to determine gender-specific preferences among four persuasive strategies (reward, competition, praise and suggestion). The authors concluded that although all persuasive strategies were effective in influencing healthy behaviour change, females preferred praise more than males.

In the second paper titled “*Network Science Analysis of Reviews of Persuasive Game Elements*” [18], the authors developed a network of persuasive strategies commonly used in game design. They began by first conducting a review of existing papers that developed persuasive games. Next, the authors developed a network of persuasive strategies, with nodes representing the strategies, and edges between nodes indicating that a pair of strategies were used in the design of a game. By computing several network metrics, the authors determined that the commonly used persuasive strategies in game design belong to dialogue support and primary task support categories of the Persuasive System Design (PSD) framework [19]. In addition, strategies such as rewards and feedback had high closeness centrality, indicating that they are important nodes in the network based on their proximity to other nodes. In conclusion, the authors suggested the use of rewards, leaderboards, challenges, narratives, constraints, and teams as these nodes formed the largest clique in the network, indicating that these nodes were more connected to each other compared to other nodes in the network.

### 4. Workshop Organizers

The PPT 2024 was organized by the following program co-chairs:

- Ifeoma Adaji, University of British Columbia, Canada
- Kiemute Oyibo, York University, Canada
- Rita Orji, Dalhousie University, Canada
- Jaap Ham, Eindhoven University of Technology, Netherlands
- Alaa Alslaity, Trent University, Canada

### 5. Program Committee

The program committee members include the following:

- Fakhroddin Noorbehbahani, University of Isfahan, Iran
- Homman Esfahani, University of Isfahan, Iran
- Gerry Chan, Dalhousie University, Canada

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