

CHI '24 WORKSHOP

Mobilizing Research and Regulatory Action on Dark Patterns and Deceptive Design Practices

Honolulu, Hawai'i, USA and Online
May 12th, 2024

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chi2024.darkpatternsresearchandimpact.com

Preface

Deceptive, manipulative, and coercive practices are deeply embedded in our digital experiences, impacting our ability to make informed choices and undermining our agency and autonomy. These design practices—collectively known as dark patterns or deceptive designs—are increasingly under legal scrutiny and sanctions, largely due to the efforts of human-computer interaction (HCI) scholars that have conducted pioneering research relating to types, definitions, and harms. Efforts to combat dark patterns are increasingly transdisciplinary, with a core of HCI scholarship and reports from numerous regulatory bodies being used to support new legislation to protect users and legal sanctions against companies that have used dark patterns to undermine user choice and agency. In this workshop, we aimed to foster further development of this community while proposing additional, transdisciplinary initiatives for social impact. Our key objectives were as follows:

1. **Consolidating methodologies to prove the existence of dark patterns:**

Describing metrics to inspect and characterize dark patterns at multiple levels, including the UI, the user journey, and the system. Indicating how dark patterns knowledge that supports this inspection process can be aligned across communities and regularly refreshed in response to new legislation and empirical work. Identifying synergies from a different range of domains and methodologies that complement each other in the identification of dark patterns and their effects.

2. **Characterizing harms of dark patterns in specific contexts and user groups:**

Identifying differential impacts of dark patterns based on particular cognitive or social biases, including the role of different forms of vulnerability on susceptibility to dark patterns.

3. **Describing counter-measures to improve informed decision-making:**

Counter-measures assist users in reflecting on their choices before and while engaging with digital interfaces, with the aim of limiting harmful consequences to the greatest degree possible. These interventions may increase the awareness of users by sensitizing or educating them or by confronting or diminishing the impact of dark patterns, either through “undeceptive” or “fair” patterns or through other counter-measures.

Each submission to the workshop was anonymously peer-reviewed by two organizers through the conference management system EasyChair, respecting potential conflicts between authors and reviewers. We accepted 15 papers out of 20 total submissions on a broad array of topics directly linked to our providing new insights on these three objectives. A smaller selection of 12 papers were selected for live presentation at the conference, with the rest discussed in breakout sessions and asynchronously in a set of open, living [Google docs](#)¹. All participants were invited to join the global Slack group and continue engaging on the topics of the workshop, as well as start fresh conversations.

¹Link to the Google Docs: <https://tinyurl.com/darkpatternsworkshophub>

Accepted Workshop Papers

Layered Analysis of Persuasive Designs: A Framework for Identification and Autonomy Evaluation of Dark Patterns — Sanju Ahuja, Jyoti Kumar

“Not Nice!”: Towards Understanding Dark Patterns in Commercial Health Apps—Ghada Alsebayel, Giovanni Troiano, Casper Harteveld

Voice-based Virtual Assistants Design and European Legislation: The Interpretation of Subliminality, Manipulation and Deception — Vittoria Caponecchia

Towards a Second Wave of Manipulative Design Research: Methodological Challenges of Studying the Effects of Manipulative Designs on Users—Lorena Sánchez Chamorro, Carine Lallemand

A View From Somewhere: Shifting Expertise in Identifying and Evaluating Dark Patterns—Rohan Grover

Disclosure by Design: How Dark Patterns Reduce Users’ Social Privacy—Dominique Kelly, Jacquelyn Burkell

Start Playing Around - Serious & Persuasive Games as a Viable Counter-Measure Against Deceptive Patterns?—Kirill Kronhardt, Jens Gerken

Seeing in the Dark: Revealing the Relationships, Goals, and Harms of Dark Patterns—Frank Lewis, Julita Vassileva

Measuring the Deceptive Potential of Design Patterns: A Decision-Making Game—Deborah Maria Löschner, Sebastian Pannasch

An Overview of Guidelines on Dark Patterns—Aryan Mamidwar, Ganesh Bhutkar

Towards Quantifying Ethical User Experience: Evaluating User Perceptions of Dark Patterns in Social Media—Doris Maria Rhomberg, Hauke Sandhausli

Comparing Nudges and Deceptive Patterns at a Technical Level—Mathias Schlolaut, Olga Kieselmann¹, and Arno Wacke

Another Subtle Pattern: Examining Demographic Biases in Dark Patterns and Deceptive Design Research—Katie Seaborn, Weichen Joe Chang

CounterSludge in Alcohol Purchasing on Online Grocery Shopping Platforms—Eszter Vigh, Angela Attwood, Anne Roudaut

Expertise Fog on the GPT Store: Deceptive Design Patterns in User-Facing Generative AI—Robert Wolfe, Alexis Hiniker

This hybrid CHI '24 workshop took place both in-person at the Hawai'i Convention Center in Honolulu, on the island of O'ahu, and virtually, on Sunday May 12, 2024, as part of the ACM (Association for Computing Machinery) Conference on Human Factors in Computing Systems. We were joined by over 20 participants, spanning career stages, world regions, and disciplinary backgrounds.

We look forward to discovering how this workshop has sparked the next phase in research and regulation on dark patterns and deceptive design practices.

Yours sincerely,
The organizing committee