TWC: Small: Cross-application and Cross-platform Tracking of Web Users Techniques and Countermeasures

Challenges:

- Ever-changing landscape of web tracking with old techniques falling out of favor and new techniques being constantly adopted
- Trackers are, by nature, trying to remain hidden
- Anti-tracking defenses often make the user more recognizable than before



Browser Fingerprinting

Solution:

- Development of platform for discovering future fingerprinting techniques in modern browsers
- Automated ad collection and correlation to understand mobile tracking
- Novel collaborative defenses that do not suffer from typical blacklist issues

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Cross-app and Cross-device tracking



Scientific Impact:

- Systematic investigation and documentation of emerging and future techniques for tracking users
- Understanding of the overlap between traditional web tracking and tracking in mobile platforms
 - Development of standalone antitracking tools that are not blacklistbased and techniques that allow users to collaboratively beat stateless tracking

Broader Impact:

- Address our society's concerns of the unclear privacy implications of using the web and mobile technologies
- Development of tools and techniques for helping users detect unwanted tracking and reclaim their lost privacy