

# **Informatics 134**

Project in User Interaction Software

# Software User Interfaces

**Interfaces are more than just input and output.**

The image shows a 'Personal Information' dialog box with the following fields and buttons:

- First Name
- Middle Name
- Last Name
- Address section:
  - House number / House name
  - Street
  - Street 2
  - City
  - State / County / Province
  - Zip / Postcode
  - Country
- Buttons at the bottom: Children, Marital History, Payments, OK, Cancel

# Software User Interfaces

**Interfaces unite human sensory systems with the computational world.**

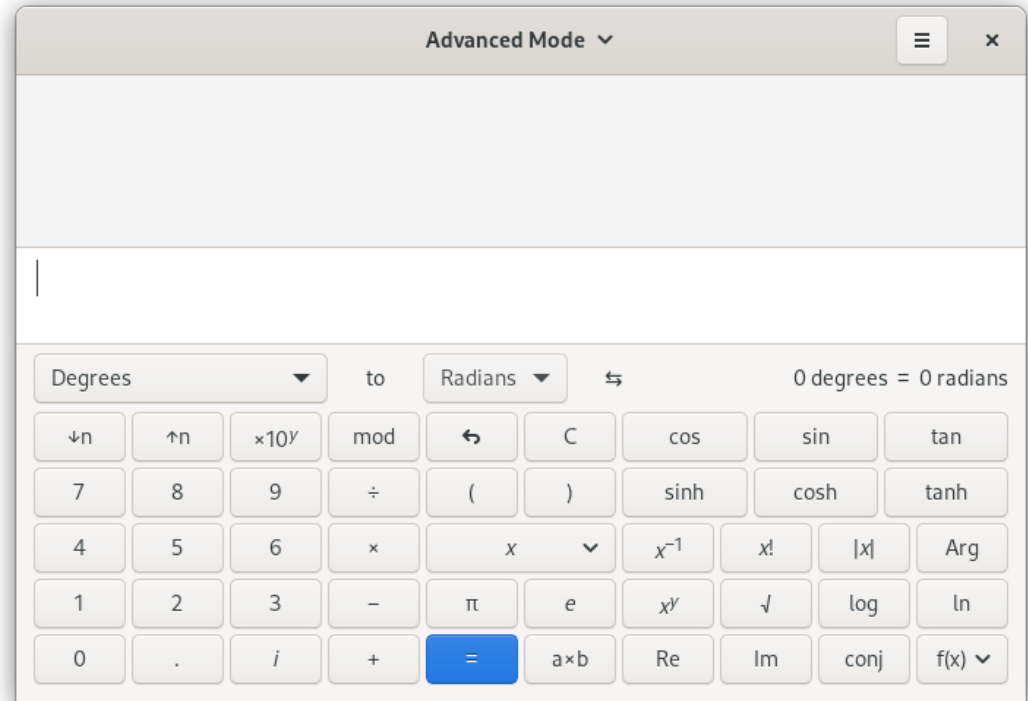
**Interfaces augment how humans interact with the real world.**

**Interfaces influence human perception of the real world.**



# Software User Interfaces

**Interfaces connect us to computation, binding APIs to views that help us interpret the results**



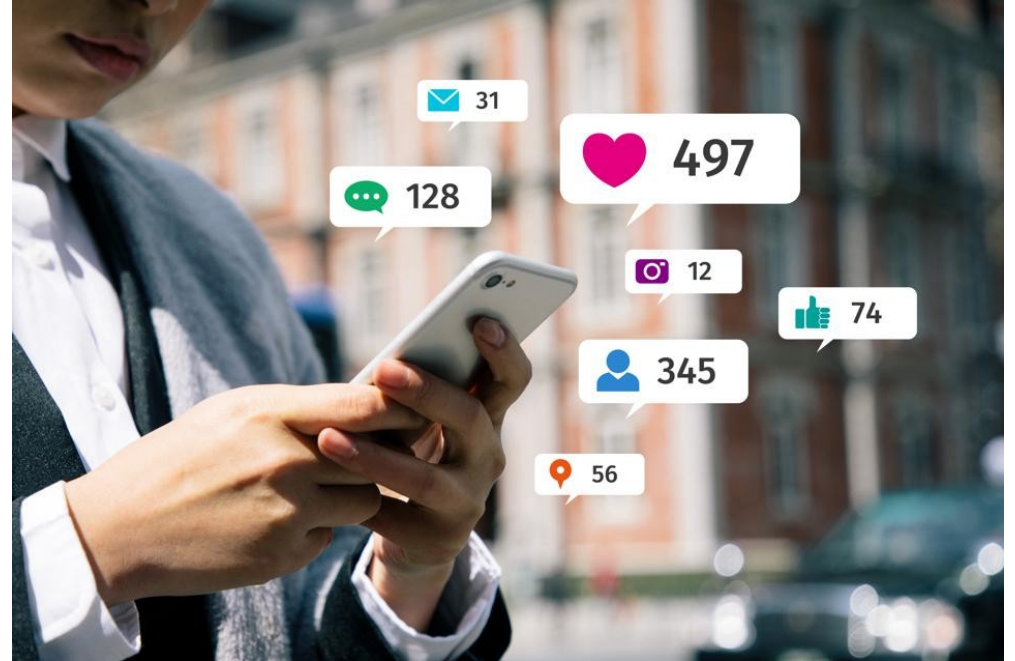
# Software User Interfaces

**Interfaces connect us to information, teaching us what exists and how we can learn from it.**



# Software User Interfaces

**Interfaces help us communicate, teaching us how to navigate social contexts.**



# Software User Interfaces

**Interfaces mediate how  
humans interact with each  
other.**

**Socioculturally  
Sociopolitically**

# Software User Interfaces

**What do we mean by  
mediation?**



# Software User Interfaces

**What do we mean by  
mediation?**

**Something that...**

**Controls.**

**Interprets.**

**Filters.**

**Acts.**

**On our behalf...**

# Software User Interfaces

**What do we mean by  
mediation?**

**Something that...**

**Controls.**

**Interprets.**

**Filters.**

**Acts.**

**On our behalf...**

# Software User Interfaces

**Why is mediation an important consideration for user interface designers?**

# Software User Interfaces

**Why is mediation an important consideration for user interface designers?**

**“How you *design* a user interface can change society”**

**- Amy Ko, University of Washington**

# Software User Interfaces

## Dark Patterns

### “Trick Questions”

Alternating meaning to subvert user expectation.

Please enter your details to reserve your item(s)

Title :

First name \* :

Last name \* :

Email \* :

Phone number \* :

☐ Please do not send me details of products and offers from Currys.co.uk

☐ Please send me details of products and offers from third party organisations recommended by Currys.co.uk

**Reserve items**

<https://www.darkpatterns.org/types-of-dark-pattern/trick-questions>

# Software User Interfaces

APPS MOBILE TECH

## Twitter plans to change how image cropping works following concerns over racial bias

*Twitter finds out machine learning isn't always the right answer*

By Chaim Gartenberg | @cgartenberg | Oct 2, 2020, 10:46am EDT

f t SHARE



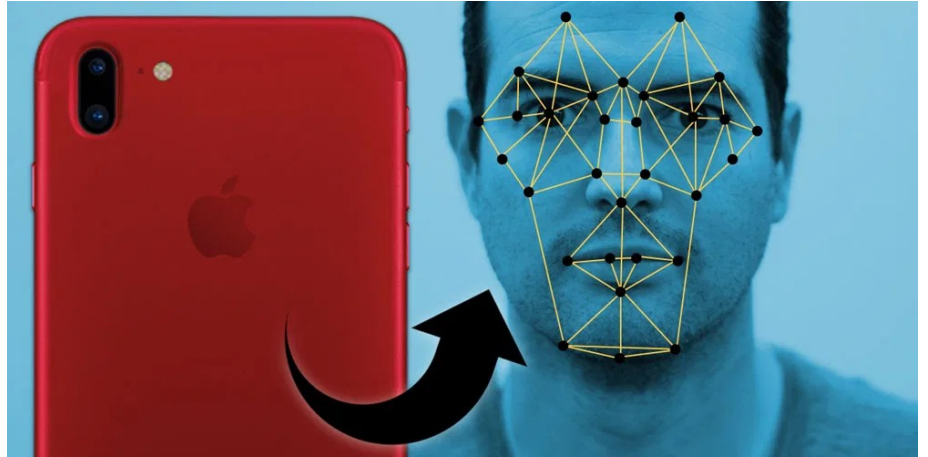
<https://www.theverge.com/2020/10/2/21498619/twitter-image-cropping-update-racial-bias-machine-learning>

# Software User Interfaces

## Apple Face ID

**Convenient?**

**But, how might it change society long term?**



# Software User Interfaces

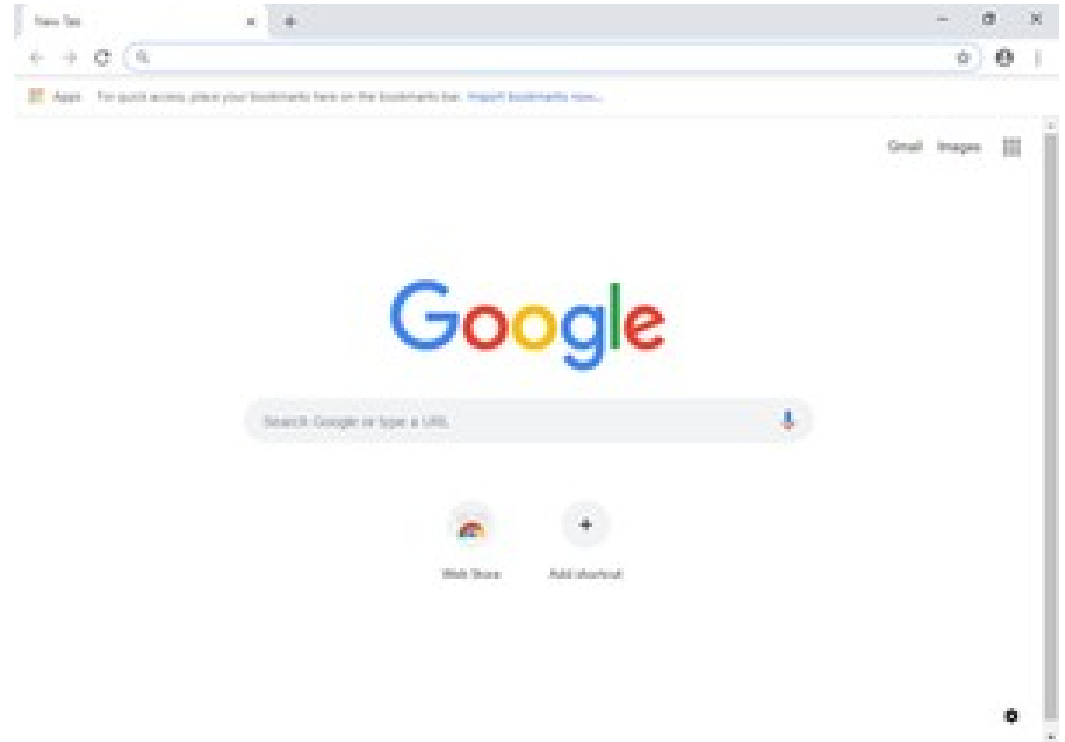
From...





# Software User Interfaces

To...



# Software User Interfaces

**When information discovery  
moves from public good to  
corporate profit...**

**What do we do?**

**Do we still trust?**

---

## Maater: Crowdsourcing to Improve Online Journalism

**Liaw**  
UCI University

**Stephanie Butler**  
Carnegie Mellon University

### Abstract

A system that acts as a tool to correct inaccuracies and

Liaw, R., Zilnik, A., Baldwin, M., & Butler, S. (2013). Maater: Crowdsourcing to improve online journalism. In CHI'13 Extended Abstracts on Human Factors in Computing Systems (pp. 2549-2554).

# Software User Interfaces

**Consider what your interfaces is designed to do and how you want to mediate with the people who use your interface.**

# Software User Interfaces

**Consider what your interfaces is designed to do and how you want to mediate with the people who use your interface.**

**Through computation?**

**Through information?**

**Through communication?**