

Human Computer Interaction

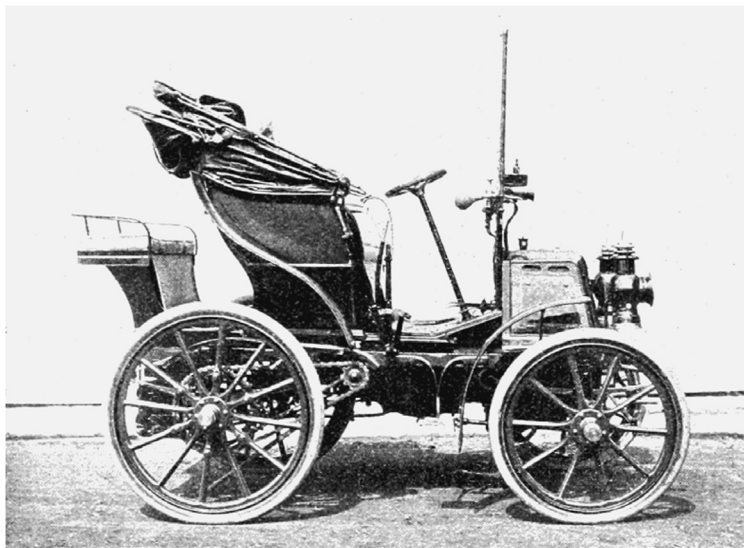
Taslima Akter

Ethics



Housekeeping

- › Update on P4
- › Take the course evaluation survey
- › Final presentations on Next Thursday (Dec 5, 2024)



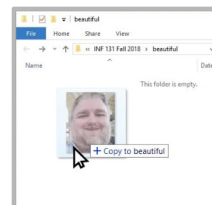
Interfaces with strong direct manipulation have staying power. E.g., steering wheel.



use meaningful metaphors to support continuous representation (floppy disk → save icon)



support physical actions to reduce translational distance



support continuous feedback and reversible actions



Today

- › Intro to Ethics in HCI
- › Activity: Ethics of Self-Driving Cars
- › Dark (Deceptive) Patterns

Traditional HCI / UX Values

- › Efficient
- › Easier to learn
- › Accessible
- › Adopted / used
- › Pleasurable
- › Safe



If we do these things,
we have a **good
system**, right?

Sometimes Values Conflict

Efficient ↔ Pleasurable

Adoption/use ↔ Safe



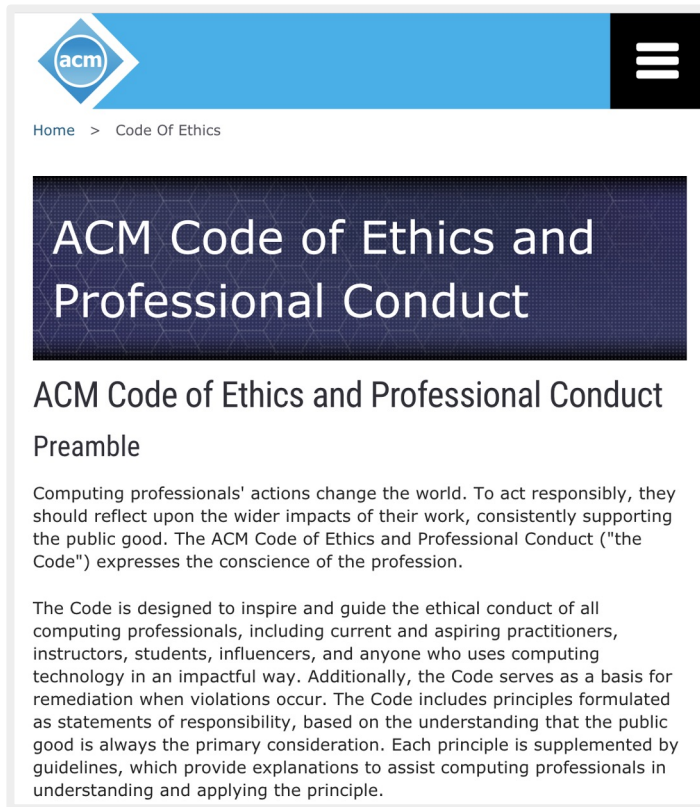
Some Basic Ethical Principles

- › **Respect for Autonomy:** allow people to make decisions in their own lives
- › **Beneficence:** work to do good
- › **Nonmaleficence:** do no harm
- › **Justice:** treat all people equally, fairly, and impartially

ACM Code of Ethics

- › Contribute to society and human well-being
- › Avoid harm to others
- › Be honest and trustworthy
- › Be fair and take action not to discriminate
- › Honor property rights
- › Give proper credit
- › Respect the privacy of others
- › Honor confidentiality

<https://www.acm.org/about-acm/acm-code-of-ethics-and-professional-conduct>



The screenshot shows the ACM Code of Ethics and Professional Conduct webpage. At the top, there is a blue header with the ACM logo on the left and a hamburger menu icon on the right. Below the header, a breadcrumb trail reads "Home > Code Of Ethics". The main content area features a dark blue banner with the title "ACM Code of Ethics and Professional Conduct" in white. Below the banner, the text "ACM Code of Ethics and Professional Conduct" is repeated in a smaller font. Underneath, the word "Preamble" is displayed. The body of the page contains two paragraphs of text. The first paragraph discusses the impact of computing professionals' actions and the purpose of the Code. The second paragraph describes the Code's role in guiding ethical conduct and its use as a basis for remediation.

acm

Home > Code Of Ethics

ACM Code of Ethics and Professional Conduct

ACM Code of Ethics and Professional Conduct

Preamble

Computing professionals' actions change the world. To act responsibly, they should reflect upon the wider impacts of their work, consistently supporting the public good. The ACM Code of Ethics and Professional Conduct ("the Code") expresses the conscience of the profession.

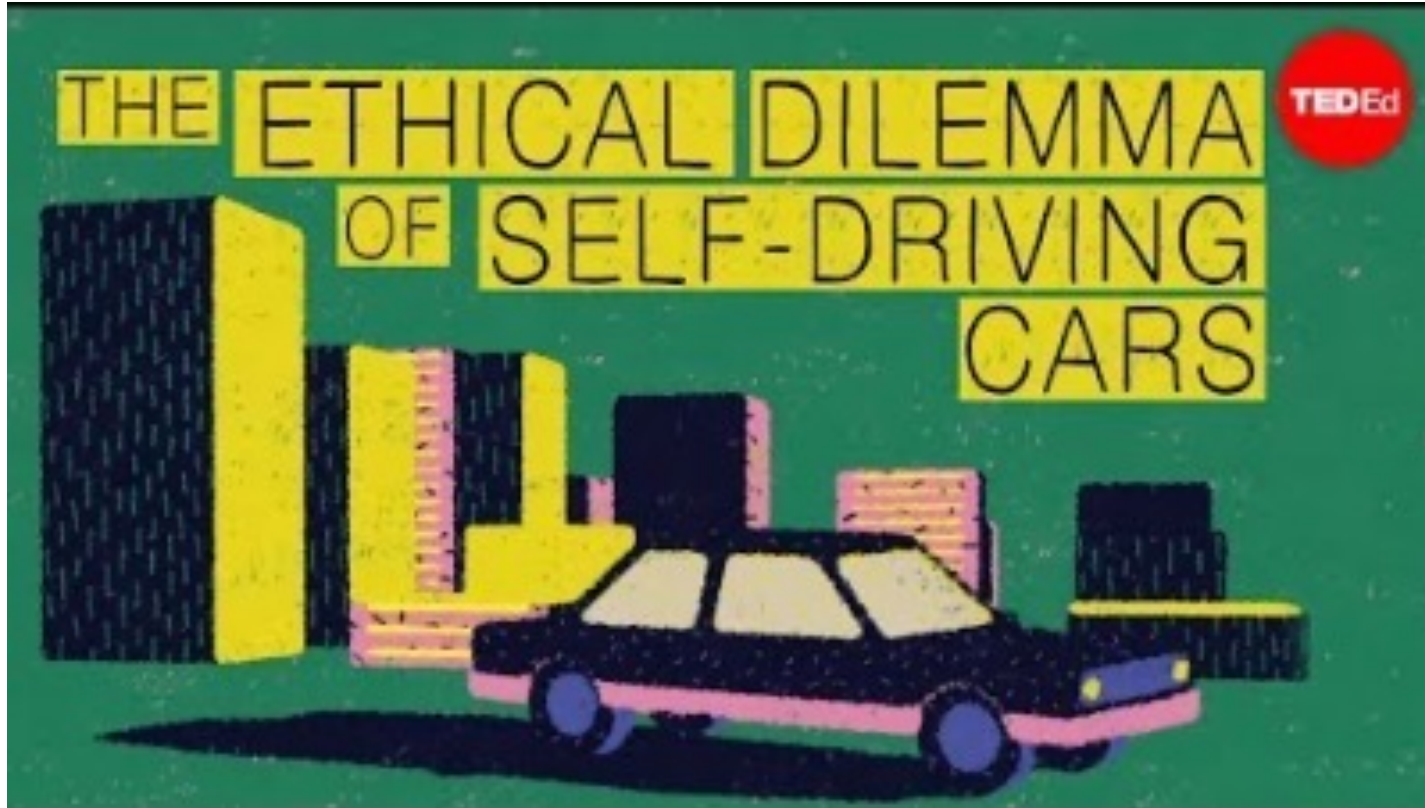
The Code is designed to inspire and guide the ethical conduct of all computing professionals, including current and aspiring practitioners, instructors, students, influencers, and anyone who uses computing technology in an impactful way. Additionally, the Code serves as a basis for remediation when violations occur. The Code includes principles formulated as statements of responsibility, based on the understanding that the public good is always the primary consideration. Each principle is supplemented by guidelines, which provide explanations to assist computing professionals in understanding and applying the principle.




Ethics and HCI Design

- › Ask not just “**can we?**” but “***should we?***”
- › Consider **unintended** consequences
- › May need to be an **advocate** or **whistleblower**
- › Ethics is more about **process** than rules

The Ethics of Self-Driving Cars



<https://www.youtube.com/watch?v=ixIoDYVfKA0>



Dark Patterns - Background

- › Play off of “design patterns”
- › originated in architecture (Christopher Alexander)
- › best-practice solutions to recurring problems
- › widely adopted in Software Engineering



Dark Patterns - Definition

- › “A user interface that has been carefully crafted to trick users into doing things”
<http://darkpatterns.org>
- › Crafted with the deliberate use (or misuse) of affordances, signifiers, and other principles
- › Prioritize company interests over good user experience

Some Dark Patterns:

- [Trick Questions](#)
- [Sneak into Basket](#)
- [Roach Motel](#)
- [Privacy Zuckering](#)
- [Price Comparison Prevention](#)
- [Misdirection](#)
- [Hidden Costs](#)
- [Bait and Switch](#)
- [Confirmshaming](#)
- [Disguised Ads](#)
- [Forced Continuity](#)
- [Friend Spam](#)



Ex 1. Forced Continuity - Definition

- › Offers a free trial, but requires a credit card
- › Bills you automatically after the trial ends
- › Does not alert you of the payment or the end of the trial period
- › Often makes cancelling the service difficult



Ex 1. Forced Continuity - Stamps.com



How do I close my Stamps.com account?



We are sorry to hear that you want to discontinue your Stamps.com service. In order to do so, please call us at our toll-free number 1-888-434-0055 Monday through Friday, 6 a.m. to 6 p.m. and Saturday, 6 a.m. to 3 p.m. Pacific Time. One of our Customer Care Representatives will be happy to assist you.

Details



MISDIRECTION

GIMLET

The podcast cover features a vibrant red and orange background with a stylized, jagged mountain range. A white, angular shape is cut out of the center of the mountains. The overall aesthetic is modern and tech-oriented.

GIMLET

JUNE 27, 2019

#144 Dark Pattern

by REPLY ALL

LISTEN NOW

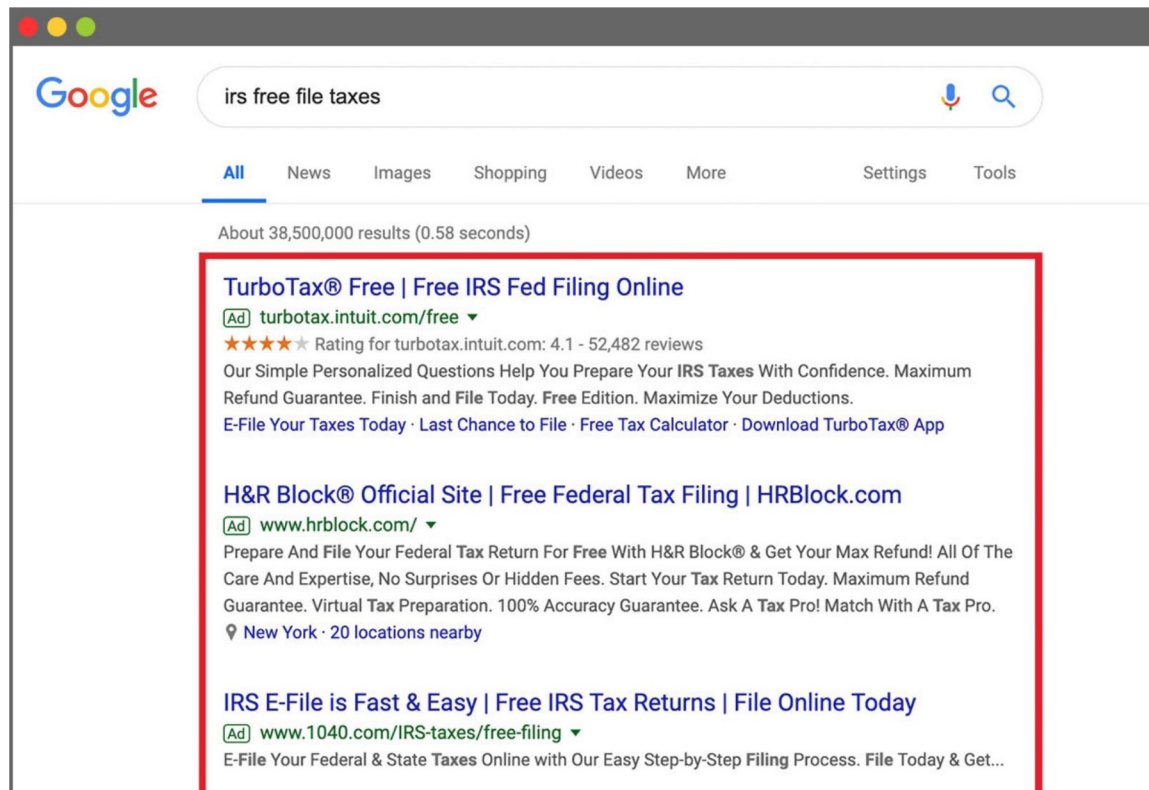
LISTEN ON  Spotify

 Listen on Apple Podcasts

Share

MISDIRECTION



A screenshot of a Google search results page. The search bar at the top contains the text "irs free file taxes". Below the search bar, there are tabs for "All", "News", "Images", "Shopping", "Videos", "More", "Settings", and "Tools". The "All" tab is selected. Below the tabs, it says "About 38,500,000 results (0.58 seconds)". The search results are listed below, with the first three results highlighted by a red rectangular border. Each result is an advertisement for tax filing services.

Google

irs free file taxes

All News Images Shopping Videos More Settings Tools

About 38,500,000 results (0.58 seconds)

TurboTax® Free | Free IRS Fed Filing Online
Ad turbotax.intuit.com/free ▼
★★★★★ Rating for turbotax.intuit.com: 4.1 - 52,482 reviews
Our Simple Personalized Questions Help You Prepare Your IRS Taxes With Confidence. Maximum Refund Guarantee. Finish and File Today. Free Edition. Maximize Your Deductions.
[E-File Your Taxes Today](#) · [Last Chance to File](#) · [Free Tax Calculator](#) · [Download TurboTax® App](#)

H&R Block® Official Site | Free Federal Tax Filing | HRBlock.com
Ad www.hrblock.com/ ▼
Prepare And File Your Federal Tax Return For Free With H&R Block® & Get Your Max Refund! All Of The Care And Expertise, No Surprises Or Hidden Fees. Start Your Tax Return Today. Maximum Refund Guarantee. Virtual Tax Preparation. 100% Accuracy Guarantee. Ask A Tax Pro! Match With A Tax Pro.
📍 [New York](#) · [20 locations nearby](#)

IRS E-File is Fast & Easy | Free IRS Tax Returns | File Online Today
Ad www.1040.com/IRS-taxes/free-filing ▼
E-File Your Federal & State Taxes Online with Our Easy Step-by-Step Filing Process. File Today & Get...

MISDIRECTION

The image is a screenshot of a web browser displaying the Intuit TurboTax website. On the left, a Google search bar is visible with the text "irs free" and a dropdown menu showing "All". Below the search bar, there are search results for "TurboTax" and "H&R Block". The main content area of the website features a large banner with the text "FREE Guaranteed. \$0 Fed. \$0 State. \$0 To File." and a woman holding a tablet displaying "NICE REFUND! \$3,194 FEDERAL". To the right of the banner is a sign-in form with fields for "User ID" and "Password", a "Remember me" checkbox, and a "Sign In" button. The sign-in form is circled in blue. Above the sign-in form, there is a navigation bar with links for "Products & Pricing", "Tools & Tips", "After You File", "Help", "Security", and "Tax Reform". A "Sign In" button is also present in the top right corner. At the bottom of the page, there is a blue footer with the text "✓ Maximum refund, guaranteed" and "✓ 100% accurate calculations".

Google

irs free

All

About 38

TurboTax

(Ad) turbo

★★★★★

Our Simple

Refund

E-File Yo

H&R Block

(Ad) ww

Prepare

Care An

Guarant

📍 New

IRS E-

(Ad) ww

E-File Yo

Maine and Massachusetts residents: Taxes are due 4/17. [File now!](#)

intuit turboTax. Products & Pricing Tools & Tips After You File Help Security Tax Reform

Sign In

En Español

intuit

✓ turboTax qb quickbooks mint

One account. Everything Intuit.

[Learn more](#)

User ID

Password

Remember me

Sign In

By clicking Sign In, you agree to the [TurboTax Terms of Service](#), [Turbo Terms of Use](#) and have read and acknowledge our [Privacy Statement](#).

[Forgot user ID or password?](#) | [Create an account](#)

FREE Guaranteed.

\$0 Fed. \$0 State. \$0 To File.

Easily and accurately file your simple tax returns for FREE. [See why it's free](#)

NICE REFUND!

\$3,194

FEDERAL

✓ Maximum refund, [guaranteed](#)

✓ 100% accurate calculations

MISDIRECTION

Google

irs free

All

About 38

TurboTax

infurtturbotax. Products & Services

FREE

Guarantee

\$0 Fed. \$0 State

Easily and accurately prepare your tax returns for FREE.

To accurately report this income, you'll need to upgrade

BENEFITS	Free Edition	Deluxe	Self-Employed
Report W-2 income	•	•	•
Report multiple sources of income—includes 1099-MISC, 1099-K, and more.		•	•
One-on-one help—get customized answers to your product and support questions from a TurboTax specialist.		•	•
Maximize deductions—claim self-employed expenses such as vehicle, phone, supplies, and more (Schedule C).			•

Keep Free \$0

Upgrade \$59.99 State additional

Upgrade \$119.99 State additional Pays for Itself

✓ Maximum

MISDIRECTION

The image is a screenshot of a web browser displaying the Intuit TurboTax website. On the left, a Google search bar shows the text 'irs free'. The main content area of the website features a large blue circle highlighting the word 'FREE' in the text 'FREE Guaranteed. \$0 Fed. \$0 State. \$0 To File.' Below this, a woman is shown holding a tablet that displays 'NICE REFUND! \$3,194 FEDERAL'. The website header includes the Intuit TurboTax logo and navigation links: 'Products & Pricing', 'Tools & Tips', 'After You File', 'Help', 'Security', and 'Tax Reform'. A 'Sign In' button is located in the top right corner. The footer contains two blue boxes with white text: '✓ Maximum refund, guaranteed' and '✓ 100% accurate calculations'.

Google

irs free

All

About 38

Turbo

(Ad) tur

★★★★★

Our Sim

Refund

E-File Yo

H&R E

(Ad) ww

Prepare

Care An

Guarant

📍 New

IRS E-

(Ad) ww

E-File Yo

Maine and Massachusetts residents: Taxes are due 4/17. [File now!](#)

intuit turbo tax

Products & Pricing Tools & Tips After You File Help Security Tax Reform

Sign In

En Español

intuit

turbo tax quickbooks mint

One account. Everything Intuit.

[Learn more](#)

User ID

Password

☐ Remember me

Sign In

By clicking Sign In, you agree to the [TurboTax Terms of Service](#), [Turbo Terms of Use](#) and have read and acknowledge our [Privacy Statement](#).

[Forgot user ID or password?](#) | [Create an account](#)

FREE
Guaranteed.
\$0 Fed. \$0 State. \$0 To File.

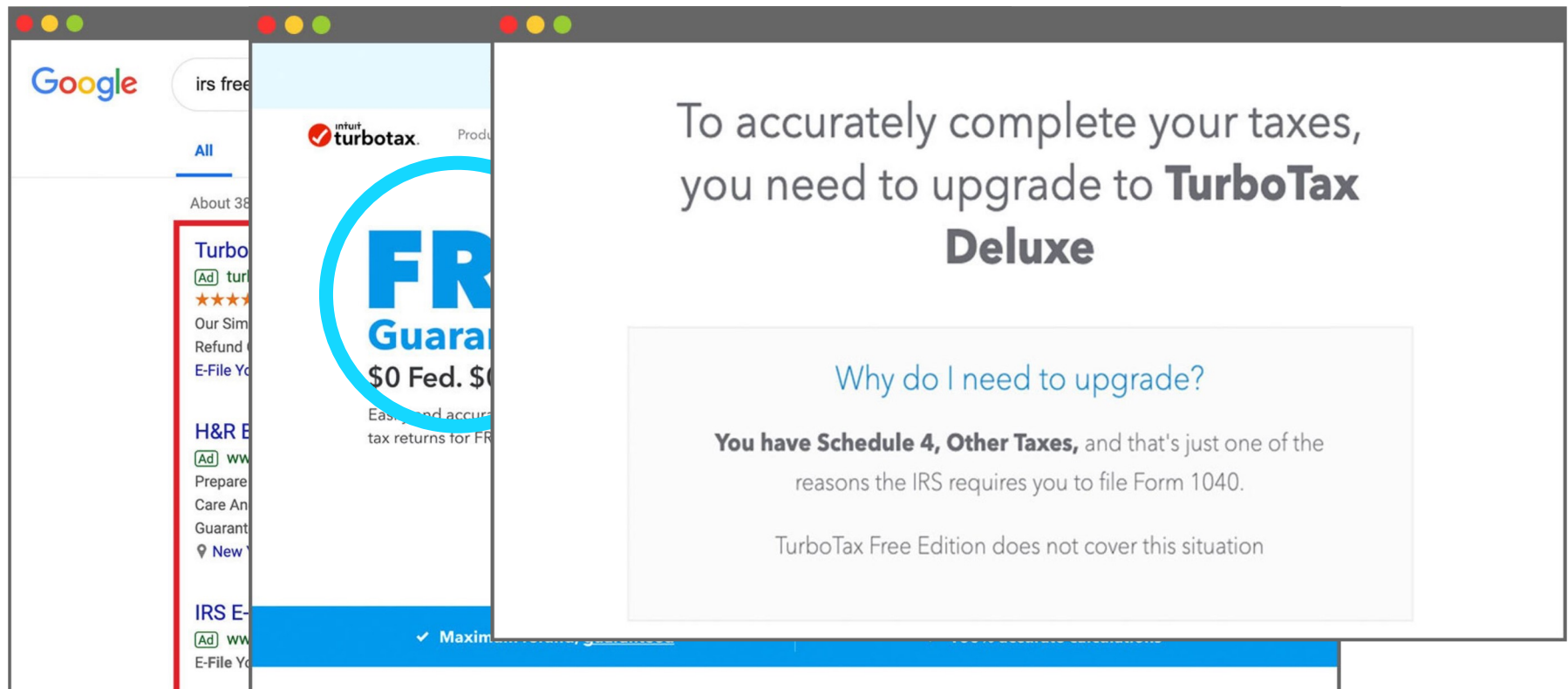
Easy and accurate. File your simple tax returns for FREE. [See why it's free](#)

NICE REFUND!
\$3,194
FEDERAL

✓ Maximum refund, [guaranteed](#)

✓ 100% accurate calculations

MISDIRECTION



The image is a screenshot of a web browser window showing a Google search for "irs free". The search results on the left include a prominent advertisement for TurboTax. The ad features the text "FREE Guarantee" and "\$0 Fed. \$0 State" in large blue letters. A blue circle is drawn around the word "FREE". To the left of the ad, a red vertical rectangle highlights the search results list, which includes links to "TurboTax", "H&R Block", and "IRS E-File".

To accurately complete your taxes,
you need to upgrade to **TurboTax Deluxe**

Why do I need to upgrade?

You have Schedule 4, Other Taxes, and that's just one of the reasons the IRS requires you to file Form 1040.

TurboTax Free Edition does not cover this situation

Let's Explore "Deceptive Patterns"



www.deceptive.design

/

Deceptive Patterns

What are deceptive patterns?

Deceptive patterns (also known as "dark patterns") are tricks used in websites and apps that make you do things that you didn't mean to, like buying or signing up for something. For example:

- ⚡ Trick wording
- ⚡ Sneaking
- ⚡ Obstruction

[View types of deceptive pattern >](#)

What laws govern the use of deceptive patterns?

Many types of deceptive pattern are already illegal in the EU and US.



Ethical Concerns w/ Big Data

- › Often seen as a solution for the problem of human bias... but algorithms and data sources can be just as biased as humans
- › Data collection can infringe on privacy, have safety implications
- › Often function as “black boxes” – we don’t know what is going on inside
- › Algorithmic decisions can have huge consequences



Ethical Concerns w/ Social Media

- › Site for marginalized groups to come together, but also site of harassment, harm
- › anonymity, virility, information access, echo chambers, bots & misinformation, algorithmic biases, profit models, etc.
- › studies impact of #blacklivesmatter mvmt on black women



A RECENT NEWS STORY...

Researcher Looks at 'Digital Traces' to Help Students

Sudha Ram's Smart Campus research tracks students' social interactions and daily routines via their CatCard usage — and leverages that information to make predictions about freshman retention.

By Alexis Blue, University Communications | March 7, 2018



Intelligent Machines

When an AI finally kills someone, who will be responsible?

Legal scholars are furiously debating which laws should apply to AI crime.

by Emerging Technology from the arXiv March 12, 2018



Design Matters

- › People use this stuff a lot
 - Young adults spend one third of their waking time on smartphones (Andrews et al., 2015)
- › Small changes can have big impacts
- › Effects aren't equal for everyone
- › Computers are everywhere, decisions may mean life or death



Activity 24
15 minutes

A24: Explore Biases in LLM

- › Choose a LLM based conversational agents of your interests
- › Ask 20 questions that is related to disability and similar 20 questions not related to disability
- › Create a spreadsheet with the prompts and responses
- › Submit spreadsheet to canvas

Human Computer Interaction

Taslima Akter

Ethics

Materials in this course were compiled from courses taught by: Matt Bietz, Stacy Branham, Tyler Fox, Elena Agapie, Nigini Oliveira, Katharina Reinecke, Andrew Davidson, Jennifer Tums, Daniel Epstein, Andrea Hartzler. Thank you to all.