ethics in technology
ethics in technology
“technoethics”
MONDAY
ETHICS
TECHNO
Glitch is the friendly community where everyone can discover & create the best stuff on the web

Check These Out

- Convert Your Voice to MIDI
- Play with Sierpinski Triangles
- Record Audio or Video in Your Browser
1 // server.js
2 // where your node app starts
3
4 // init project
5 var express = require('express');
6 var bodyParser = require('body-parser');
7 var app = express();
8 app.use(bodyParser.urlencoded({ extended: true }));
9
10 // we've started you off with Express,
11 // but feel free to use whatever libs or frameworks you'd like through `package.json`.
12
14 app.use(express.static('public'));
15
16 // init sqlite db
17 var fs = require('fs');
18 var dbFile = '/data/sqlite.db';
19 var exists = fs.existsSync(dbFile);
20 var sqlite3 = require('sqlite3').verbose();
21 var db = new sqlite3.Database(dbFile);
22
23 // if ./data/sqlite.db does not exist, create it, otherwise print records to console
24 db.serialize(function(){
25   if (!exists) {
26     db.run('CREATE TABLE Dreams [dream TEXT]');
27     console.log('New table Dreams created!');
28   }
29   // insert default dreams
30   db.serialize(function(){
31     db.run('INSERT INTO Dreams [dream] VALUES "Find and count some sheep", "Climb a really tall mountain", "Wash the dishes"');
32   });
33 });
34
Activity Log  Clear  Debugger  Console  

Database "Dreams" ready to go!  
Your app is listening on port 3000  
1 record: { dream: 'Find and count some sheep' }  
1 record: { dream: 'Climb a really tall mountain' }  
1 record: { dream: 'Wash the dishes' }
Hello there, how are you feeling today?

Your day was great.

Never waste your time trying to explain who you are to people who are committed to misunderstanding.
“Computing professionals’ actions change the world.”

ACM Code of Ethics and Professional Conduct, Preamble
jenn schiffer @jennschiffer 14 Nov 2017

i gotta say - if you're teaching coding workshops at conferences and "not" working ethics and the like into your curriculum, you're not using your platform correctly in this the year 2017. and if it "has nothing to do" with the code you're not assigning curriculum correctly.

John Michelin @Journey4John

Repeating to @jennschiffer

Whose ethics?

7:53 PM - 15 Nov 2017
ACM Code of Ethics and Professional Conduct

Adopted by ACM Council 6/22/18.

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.
1. an ethical principle
2. what does it even mean?
3. who is “blowing it”?
4. how I try to, how others do (and how can others) actively apply this principle?
5. possible lessons for students, parents, friends, family, trivia night team members, seamless delivery people, etc.
“A computing professional should contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.”

ACM Code of Ethics and Professional Conduct, 1.1
• consider the quality of life of all people
• use our skills for the benefit of society and its environment
• promote human rights and autonomy
• minimize negative consequences of computing
- prioritize the needs of those less advantaged
- respect diversity
- volunteer
- promote environmental sustainability
"The only way that I can see to deploy this much financial resource is by converting my Amazon winnings into space travel. That is basically it."

-Jeff Bezos, founder and CEO of Amazon
Everyone needs running water

Since July 2019, people like you have helped nearly 1000 families in Detroit, Baltimore, and surrounding areas with their water bills.

I want to help with a water bill  I need help with my water bill

codeforamerica.org

codenation.org

detroitwaterproject.org
● what are some ways technology can help your local community?
● talk about local non-profits, maybe have them come in and talk about how tech hurts and/or can help them.
● what are ways jeff bezos can invest his 100+ billion dollar fortune?
● pick a new technology and talk about who the stakeholders are (like self-driving cars)
“A computing professional should avoid harm.”

ACM Code of Ethics and Professional Conduct, 1.2
• significant and unjust harm
• avoidance and mitigation
• cautious whistle-blowing
Volkswagen Engineer Gets Prison in Diesel Cheating Case

James Liang, a Volkswagen engineer, is the first employee sent to prison in the scandal that has tainted the company's reputation and cost it billions in fines and settlements with consumers. Virginia Lozano/Detroit News, via Associated Press

By Bill Vlasic

Aug. 25, 2017
Microsoft Employees Protest Work With ICE, as Tech Industry Mobilizes Over Immigration

By Sheera Frenkel
June 19, 2018


Amazon employees demand company cut ties with ICE

By Hamza Shaban
June 22

• talk about how technology can be used to harm people, beyond just evil robots in the movies.
• discuss how technology facilitates cyber-bullying and try to design a social media site that avoids abusive behavior
• think of how your school monitors and prevents cyber-bullying
“A computing professional should be honest and trustworthy.”

ACM Code of Ethics and Professional Conduct, 1.3
• transparency
• forthright with failures
• truthful claims and data
Hot Startup Theranos Has Struggled With Its Blood-Test Technology

Silicon Valley lab, led by Elizabeth Holmes, is valued at $9 billion but isn’t using its technology for all the tests it offers

By John Carreyrou
Updated Oct. 16, 2015 3:20 p.m. ET

https://www.wsj.com/articles/theranos-has-struggled-with-blood-tests-1444881901
Theranos Whistleblower Shook the Company—and His Family

Tyler Shultz says he wanted to shield reputation of former Secretary of State George Shultz, a Theranos director and his grandfather; $400,000 in legal fees

By John Carreyrou

● Teach students and colleagues how to look out for dishonest sources of news and information on the web.

● Discuss what the possible consequences would have been were Theranos not to be exposed.
“A computing professional should be fair and take action not to discriminate.”

ACM Code of Ethics and Professional Conduct, 1.4
• equality, tolerance, respect, justice
• anti-prejudice and anti-harassment
• inclusive and accessible
Amazon scraps secret AI recruiting tool that showed bias against women

SAN FRANCISCO (Reuters) - Amazon.com Inc's (AMZN.O) machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.

“We did some homework—speaking to New Yorkers, branding people, and even running some survey work asking about the name and any potential offense it might cause. But it’s clear that we may not have been asking the right questions of the right people.”

-Paul McDonald, co-founder and CEO of Bodega
The A11Y Project
A community-driven effort to make web accessibility easier.
a11yproject.com
- Talk to students about bias, asking if they recognize it in their use of technology.
- Roleplay bias to lead a discussion on algorithms being used to make decisions.
- Have students with seeing abilities try to browse the web with a blindfold and screen reader, or watch YouTube without sound and only captions. Discuss how the web has primarily been built for those who can see and hear well.
“A computing professional should respect the work required to produce new ideas, inventions, creative works, and computing artifacts.”

ACM Code of Ethics and Professional Conduct, 1.5
• credit creators
• respect copyrights, licenses, and other author protections
• contribute efforts towards free, open source, and/or public domain work
Shop Art Theft

Support independent artists by purchasing their work, as (allegedly) stolen by major retailers.

ABOUT   SUBMIT A NEW CASE   ARCHIVE

STOP, THIEF!

MINI
Swept Apple Studio
Summer 2017

THEIRS
MODCLOTH
April 2018

NOT COOL, MODCLOTH!

ORIGINAL
Kirsten Carrera

COPY
Magical Thunder Press

CREATED
September 30, 2016
SPOTTED
October 30, 2017

A major pin vendor based in LA is selling this for the original creator and both claim it is a "simple coincidence"
● have students reverse image search a set of images to find the source and teach them how to cite them
● discuss open source licenses, creative commons, public domain
● try to come up with alternatives for DRM that still prevent piracy
● be mindful of DRM when choosing textbook and software to adopt
“A computing professional should respect privacy.”

ACM Code of Ethics and Professional Conduct, 1.6
● conversant of privacy implications
● ensure encryption and accuracy
● transparency and consent
● minimize collection of personal data
Equifax’s massive 2017 data breach keeps getting worse

Equifax said Thursday that 2.4 million more consumers than previously reported were affected by the massive data breach the company suffered last year, adding to an already stunning toll.

This means that as many as 147.9 million consumers have been affected in some way by the breach, which amounts to about half the country.


Uber said it protects you from spying. Security sources say otherwise

By Will Evans / December 12, 2016

For anyone who’s snagged a ride with Uber, Ward Spangenberg has a warning: Your personal information is not safe.

https://www.revealnews.org/article/uber-said-it-protects-you-from-spying-security-sources-say-otherwise/
letsencrypt.org
• read the privacy statements of popular apps that you or students use. What is surprising? How do some vary from others?

• talk about companies in all industries sell our data or use them in advertising. What if Snapchat decided to start using students snaps in ads - is that ethical?

• discuss what would you do if you found out your students data was hacked?
“A computing professional should honor confidentiality.”

ACM Code of Ethics and Professional Conduct, 1.7
• protect trade secrets, client data, etc
• thoughtfully consider before disclosing confidential information to authorities
We got a great glimpse into how Google figured out when a star former engineer allegedly stole 14,107 files

- transparencyreport.google.com
- transparency.facebook.com
- transparency.twitter.com
● discuss the uber v. waymo case
● talk about employee agreements and non-disclosure agreements, preparing students for what they are probably agreeing to when starting a job in the tech industry
● what tools and/or processes do you have in place to mitigate release of internal materials (assignments, test scores)
“In cases where misuse or harm are predictable or unavoidable, the best option may be to not implement the system.”

ACM Code of Ethics and Professional Conduct, 2.9
“A computing professional, especially one acting as a leader, should ensure that the public good is the central concern during all professional computing work.”

ACM Code of Ethics and Professional Conduct, 3.1
• people first
• the public good should be the focus throughout the entire engineering process
“A computing professional, especially one acting as a leader, should articulate, encourage acceptance of, and evaluate fulfillment of social responsibilities by members of the organization or group.”

ACM Code of Ethics and Professional Conduct, 3.2
● encourage team members’ participation in meeting social responsibilities
● discourage tendencies to do otherwise
40 of the biggest scandals in Uber's history

Kate Taylor  Nov. 24, 2017, 1:50 PM

Uber ex-CEO Travis Kalanick  Chris Ratcliffe/Bloomberg via Getty Images

● coding initiatives for underrepresented groups
● civic hackathons and grants
• ask yourself when grading projects or teaching students to code or use technology: how can this tool/use be used to harm the public good?

• following a study of ethics in tech, hold a hackathon in the classroom to design projects that would help the public good.
“A computing professional, especially one acting as a leader, should manage personnel and resources to enhance the quality of life.”

ACM Code of Ethics and Professional Conduct, 3.3
• enhance the quality of working life
• consider the growth, health, well-being and dignity of all workers
AMAZON WORKING CONDITIONS: URINATING IN TRASH CANS, SHAMED TO WORK INJURED, LIST OF EMPLOYEE COMPLAINTS

BY NINA GODLEWSKI ON 9/12/18 AT 4:42 PM

https://www.newsweek.com/amazon-drivers-warehouse-conditions-workers-complains-jeff-bezos-bernie-1118849
Salesforce just spent another $3 million to close its pay gap

by Julia Horowitz  @juliakhorowitz

April 4, 2017: 12:35 PM ET

• have students research jobs at tech companies that aren’t engineer roles and compare salaries and reviews

• try to make the classroom the best environment to make and use technology, since what’s available at home (if anything) will vary.
“A computing professional, especially one acting as a leader, should articulate, apply, and support policies and processes that reflect the principles of the Code.”

ACM Code of Ethics and Professional Conduct, 3.4
- encourage and reward good behavior
- hold people accountable when acting unethically
Google Employees Stage Global Walkout Over Payouts To Alleged Sexual Harassers

Employees are outraged over multimillion dollar payouts to high profile executives accused of sexual misconduct.

By Ryan Grenoble and Hayley Miller
• putting people in charge of community-driven and ethical efforts
• laws are way behind the times with technology - have students play legislator and create laws for holding unethical computing professionals accountable.
“A computing professional, especially one acting as a leader, should create opportunities for members of the organization or group to grow as professionals.”

ACM Code of Ethics and Professional Conduct, 3.5
• make educational opportunities available for team members
• help members understand the complexity of our work and take responsibility for their work
• before a project, have students list what they consider success along with risks/challenges to revisit at end of a project. do the same for your own projects.

• map students goals and challenges to lessons you can bring to the classroom.
“A computing professional, especially one acting as a leader, should use care when modifying or retiring systems.”

ACM Code of Ethics and Professional Conduct, 3.6
• understand that changes, removal of features, and discontinuation of software have an impact on users
• assist stakeholders through significant changes
• be transparent of changes and also help users understand them
Google Shuts Down Google Plus After Leaked Memo Exposed Data Breach

By Sissi Cao • 10/09/18 11:36am

The leaked information included user name, email address, occupation, age and gender. Sean Gallup/Getty Images

Mapzen Alternatives

Mapzen will cease operations at the end of January 2018, and its hosted APIs and all related support and services will turn off on February 1, 2018.

Your two options are to switch to another hosted API that offers similar functionality, or to run your own servers with the open-source projects that powered Mapzen services. We list several options below to make this as easy as possible.

Alternate services and hosted APIs

Mapzen Vector Tiles and Cartography

For basemaps and vector tiles, you may want to consider:

- Nextzen (A long-term support version of own own Tilezen)
- Mapbox
- OpenMapTiles
- Thunderforest
- MAPCAT
● ask students what apps they’ve used that have gone away or changed
● talk about what students would do if their favorite app shut down. what would they hope the owners would do in the process?
● consider ways to hold the makers of software you use accountable for transparency and guidance through changes
“A computing professional, especially one acting as a leader, should recognize and take special care of systems that become integrated into the infrastructure of society.”

ACM Code of Ethics and Professional Conduct, 3.7
● be good stewards of systems that become integrated with everyday activities
● monitor levels of integration
● establish policies for fair system access
Mastodon Is Like Twitter Without Nazis, So Why Are We Not Using It?

I quit Twitter to join a kinder, nicer, decentralized open source version of Twitter.

• talk about what “free speech” means and how it applies or doesn’t apply to social media.

• pay attention during Surya’s keynote tomorrow!
“The future of computing depends on both technical and ethical excellence.”

ACM Code of Ethics and Professional Conduct, 4.1
ACM Code of Ethics and Professional Conduct

Adopted by ACM Council 6/22/18.

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DO YOU LIKE TO DRAW WITH CRAYONS?

I'M NOT VERY GOOD AT IT.

BUT IT DOESN'T MATTER.

IT'S THE FUN OF DOING IT THAT'S IMPORTANT.

IT FEELS GOOD TO HAVE MADE SOMETHING.

THE BEST THING IS THAT EACH PERSON'S WOULD BE DIFFERENT.
“Fame is a four-letter word; and like tape or zoom or face or pain or life or love, what ultimately matters is what we do with it.”

Mr Rogers
THANK YOU
use glitch.com
follow @jennschiffer
email jenn@glitch.com
be ethical