

What does it mean to be a  
“Responsible Developer”?

Technology is neither good nor  
bad; nor is it neutral.

Kranzberg's First Law of Technology

Modern humanity is distinguished  
by  
paleolithic emotions,  
medieval institutions,  
and god-like technology

E.O. Wilson

# Hippocratic Oath

- I swear to fulfill, to the best of my ability and judgment, this covenant:
- I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.
- I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.
- I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.
- I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.
- I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.
- I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.
- I will prevent disease whenever I can, for prevention is preferable to cure.
- I will protect the environment which sustains us, in the knowledge that the continuing health of ourselves and our societies is dependent on a healthy planet.
- I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.
- If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

# Hippocratic Oath

- I swear to fulfill, to the best of my ability and judgment, this covenant:
- I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.
- I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.
- I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.
- I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.
- I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.
- I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.
- I will prevent disease whenever I can, for prevention is preferable to cure.
- I will protect the environment which sustains us, in the knowledge that the continuing health of ourselves and our societies is dependent on a healthy planet.
- I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.
- If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

# ACM Code of Ethics: General Ethical Principles

- Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.
- Avoid harm.
- Be honest and trustworthy.
- Be fair and take action not to discriminate.
- Respect the work required to produce new ideas, inventions, creative works, and computing artifacts.
- Respect privacy.
- Honor confidentiality.

# ACM Code of Ethics: Professional Responsibilities

- Strive to achieve high quality in both the processes and products of professional work.
- Maintain high standards of professional competence, conduct, and ethical practice.
- Know and respect existing rules pertaining to professional work.
- Accept and provide appropriate professional review.
- Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.
- Perform work only in areas of competence.
- Foster public awareness and understanding of computing, related technologies, and their consequences.
- Access computing and communication resources only when authorized or when compelled by the public good.
- Design and implement systems that are robustly and usably secure.

# ACM Code of Ethics: Professional Leadership Principles

- Ensure that the public good is the central concern during all professional computing work.
- Articulate, encourage acceptance of, and evaluate fulfillment of social responsibilities by members of the organization or group.
- Manage personnel and resources to enhance the quality of working life.
- Articulate, apply, and support policies and processes that reflect the principles of the Code.
- Create opportunities for members of the organization or group to grow as professionals.
- Use care when modifying or retiring systems.
- Recognize and take special care of systems that become integrated into the infrastructure of society.



# IEEE Code of Ethics

- We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members, and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:
- To hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, and to disclose promptly factors that might endanger the public or the environment;
- To avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
- To be honest and realistic in stating claims or estimates based on available data;
- To reject bribery in all its forms;
- To improve the understanding by individuals and society of the capabilities and societal implications of conventional and emerging technologies, including intelligent systems;
- To maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;
- To seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;
- To treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;
- To avoid injuring others, their property, reputation, or employment by false or malicious action;
- To assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

# Don't Be Evil

Google Code of Conduct

PRIVACY AND SECURITY

# Google Employees Resign in Protest Against Pentagon Contract



Kate Conger

5/14/18 6:00AM • Filed to: PROJECT MAVEN ▾



497.6K



573



36



Photo: Mark Wilson (Getty)

<https://gizmodo.com/google-employees-resign-in-protest-against-pentagon-con-1825729300>

# Why Uber's self-driving car killed a pedestrian

*It was the first fatal accident of its kind*



Reuters

ALEX DAVIES

TRANSPORTATION 05.16.2019 05:46 PM

## Tesla's Latest Autopilot Death Looks Just Like a Prior Crash

A Florida man was killed March 1 when his Tesla collided with a tractor trailer that was crossing its path. A government report says the Autopilot feature was activated.



# Facebook data privacy scandal: A cheat sheet



by **James Sanders** | **Dan Patterson**  
in **Security**  
on July 24, 2019, 8:52 AM PST

Read about the saga of Facebook's failures in ensuring privacy for user data, including how it relates to Cambridge Analytica, the GDPR, the Brexit campaign, and the 2016 US presidential election.

## *How Misinformation 'Superspreaders' Seed False Election Theories*

Researchers have found that a small group of social media accounts are responsible for the spread of a disproportionate amount of the false posts about voter fraud.

The Switch • Perspective

### I fell for Facebook fake news. Here's why millions of you did, too.

This crazy video is completely fake. Yet it's been watched 14 million times on Facebook — including by me. Here's why fake news is still a thriving business.



This computer-generated video, created by artist Aristomenis Tsirbas, found its way into a Facebook video viewed nearly 14 million times that falsely claimed to show a real plane landing. (MeniThings Productions)



By **Geoffrey A. Fowler**  
Technology columnist

## **Mob storms Capitol as Facebook, Twitter roles come under fire**

The social media companies face pressure to suspend Trump's accounts after the president used social media to push false claims of election fraud.



**Queenie Wong, Andrew Morse, Carrie Mihalcik**  
Jan. 7, 2021 11:12 a.m. PT



▶ **LISTEN** - 07:03

RETAIL OCTOBER 10, 2018 / 7:04 PM / UPDATED 2 YEARS AGO

## Amazon scraps secret AI recruiting tool that showed bias against women

By Jeffrey Dastin

8 MIN READ



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

### Business

# Apple Card algorithm sparks gender bias allegations against Goldman Sachs

Entrepreneur David Heinemeier Hansson says his credit limit was 20 times that of his wife, even though she has the higher credit score

TIME

COVID-19 WINTER

VACCINE UPDATES

LOST IN THE PANDEMIC

CORONAVIRUS STATS



NEWSLETTER

SUBSCRIBE

IDEAS • TECH BIAS






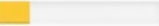












## Google Has a Striking History of Bias Against Black Girls

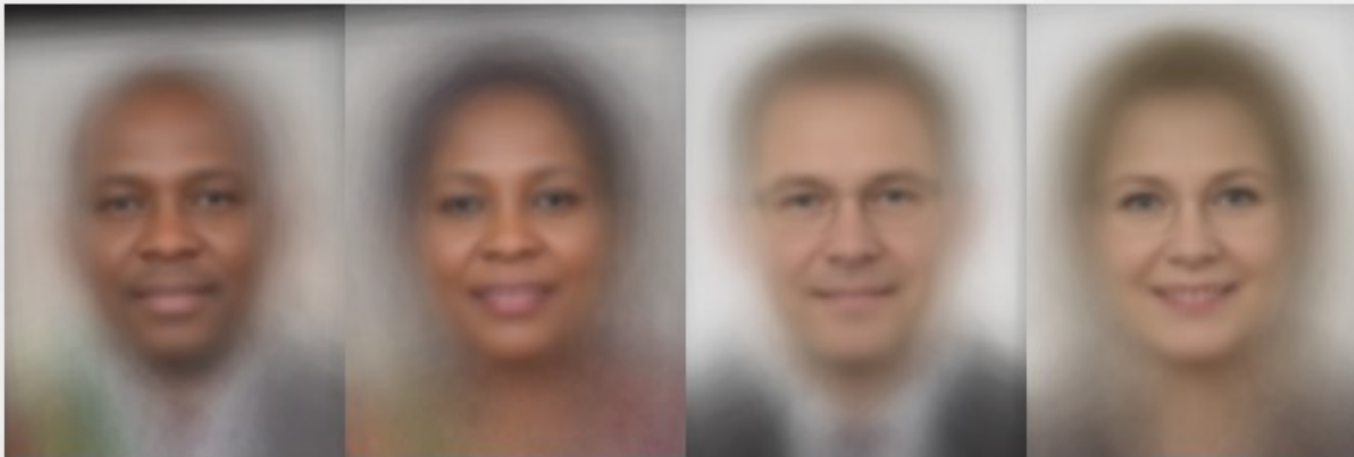
BY **SAFIYA NOBLE** MARCH 26, 2018 4:30 PM EDT

Dr. Safiya U. Noble is the author of *Algorithms of Oppression: How Search Engines Reinforce Racism* and is an assistant professor of communication at the University of Southern California, Annenberg School of Communication & Journalism. She is a partner in *Stratelligence* and co-founder of the *Information Ethics & Equity Institute*.

IDEAS



Gender Classifier	Darker Male	Darker Female	Lighter Male	Lighter Female	Largest Gap
 Microsoft	94.0% 	79.2% 	100% 	98.3% 	20.8% 
 FACE++	99.3% 	65.5% 	99.2% 	94.0% 	33.8% 
 IBM	88.0% 	65.3% 	99.7% 	92.9% 	34.4% 



Gender Shades - Joy Boulamwini

# Universal design example: Designing for gender diversity and inclusion

- Give people a really good reason for asking
- Make it private, safe, and anonymous
- Always make it optional
- Ask for pronouns instead
- Be ready for a complex answer
- Consider internationalization
- Just don't ask

Gender\*

☐ Male ☐ Female

---

## Gender

Check one or more options that reflect your gender.

- ☐ woman
  - ☐ man
  - ☐ non-binary
  - ☐ transgender
  - ☐ intersex
  - ☐ Two Spirit (see below for more information)
  - ☐ gender non-conforming
  - ☐ Other:
- 

Sabrina Fonseca,

<https://uxdesign.cc/designing-forms-for-gender-diversity-and-inclusion-d8194cf1f51>



# Don't Be Evil

Google Code of Conduct

More than “How do we DO NO  
EVIL with technology?” We ought  
to consider “How do we DO  
GOOD?”

Ge Wang, Artful Design