Good
Technology
Collective

What is good Technology?

35C3 - 28. December 2018

About the GTC

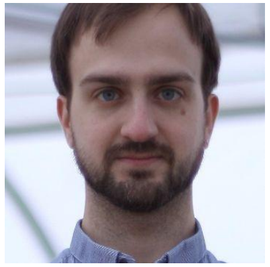
- NGO, Founded in Dec 2017
- Diverse Expert Council
- 3 Areas of work:
    1. Educating the Public
    2. Educating Engineers
    3. Legislation (long-term)

2018 so far

27	20+	15	1
COUNCIL MEMBERS	**ARTICLES**	**EVENTS**	**STANDARD PUBLISHED**
IN 2018	IN 2018	IN 2018	TODAY! (DRAFT)

https://goodtechnologycollective.com/**newsletter**/

GTC Council Members



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Entrepreneur

Nicolas Granatino
Venture Capitalist

Luciano Floridi
Professor

Diego Naranjo
Researcher and Activist

Ilya Flaks
VR/AR Entrepreneur

Vladimir Smerkis
Crypto Entrepreneur

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Activist and Member of Parliament

Rachel Coldicutt
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Artist

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Futurist

Yann Leretaille
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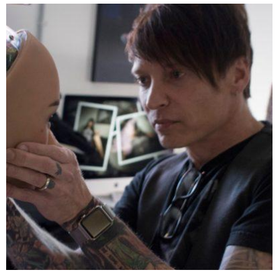


Matt McMullen
AI Entrepreneur

Yury Vlasov
Entrepreneur

Kaustav Bhattacharya
Entrepreneur

Paul Armstrong
Journalist

Annie Machon
Whistleblower

Jennifer Baker
Technology Reporter

Farid Ismayilzada
Entrepreneur

Gunita Kulikovska
VR Entrepreneur

Bard Anders Kasin
VR/AR Entrepreneur

Pictures provided by Council Members

How social media filter bubbles and algorithms influence the election

With Facebook becoming a key electoral battleground, researchers are studying how automated accounts are used to alter political debate online

Revealed: Facebook's internal rules on sex, terrorism and violence

▲ A Facebook Live broadcast hosted by ITV News had Theresa May answering questions sent in by users of the site. Photograph: Facebook/PA

One of the most powerful players in the British election is also one of the most opaque. With just over two weeks to go until voters go to the polls, there are two things every election expert agrees on: what happens on social media, and Facebook in particular, will have an enormous effect on how the country votes; and no one has any clue how to measure what's actually happening there.

AI in the court: When algorithms rule on jail time

January 31, 2018 by Matt O'brien And Dake Kang

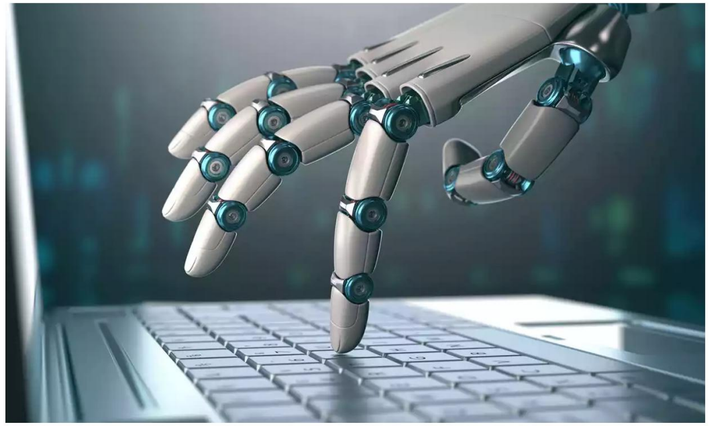
In this Aug. 30, 2017, photo, Stephanie Pope-Earley, right, sorts through defendant files scored with risk-assessment software for Jimmy Jackson Jr., a municipal court judge, on the first day of the software's use in Cleveland. In a growing … more

The centuries-old process of releasing defendants on bail, long the province of judicial discretion, is getting a major assist ... courtesy of artificial intelligence.

In late August, Hercules Shepherd Jr. walked up to the stand in a Cleveland courtroom, dressed in an orange jumpsuit. Two nights earlier, an officer had arrested him at a traffic stop with a small bag of cocaine, and he was about to be arraigned.

AI programs exhibit racial and gender biases, research reveals

Machine learning algorithms are picking up deeply ingrained race and gender prejudices concealed within the patterns of language use, scientists say



▲ AI has the potential to reinforce existing biases because, unlike humans, algorithms are unequipped to consciously counteract learned biases, researchers warn. Photograph: KTS Design/Getty Images/Science Photo Library RF

An artificial intelligence tool that has revolutionised the ability of computers to interpret everyday language has been shown to exhibit striking gender and racial biases.

The findings raise the spectre of existing social inequalities and prejudices being reinforced in new and unpredictable ways as an increasing number of decisions affecting our everyday lives are ceded to automatons.

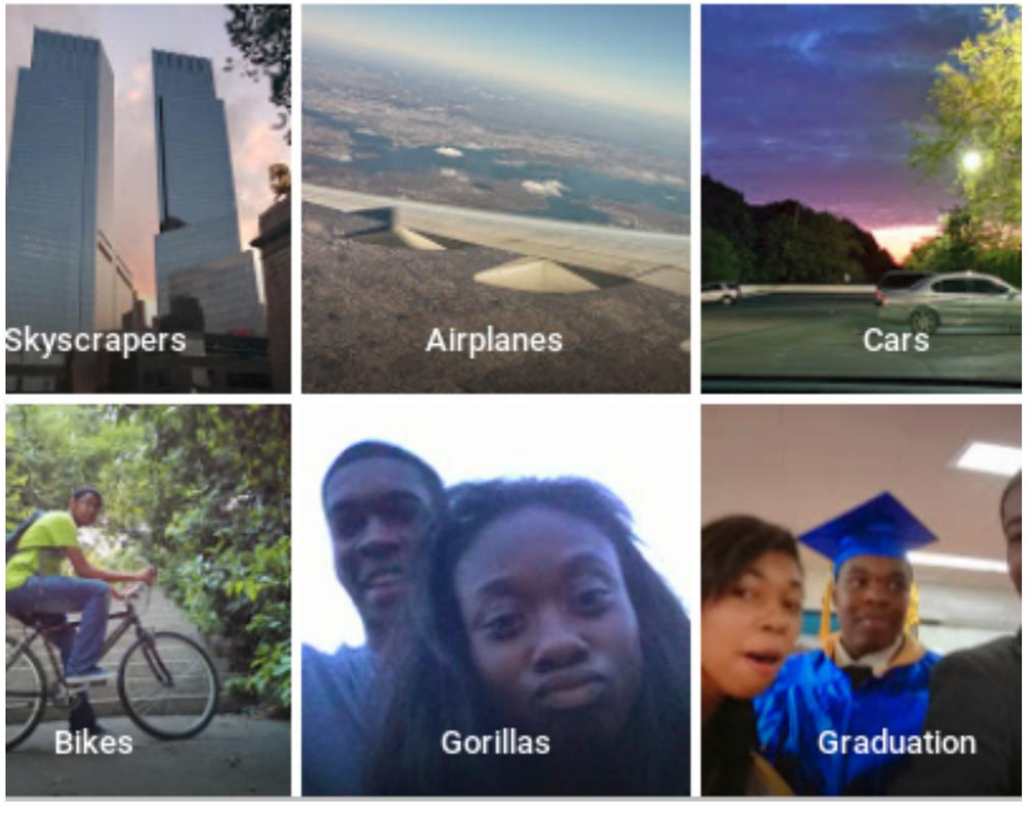
Negative Impacts of Technology?

SpaceX landing two Falcon Heavy boosters at the same time

Unintended Consequences?

Two years later, Google solves 'racist algorithm' problem by purging 'gorilla' label from image classifier

JANUARY 11, 2018



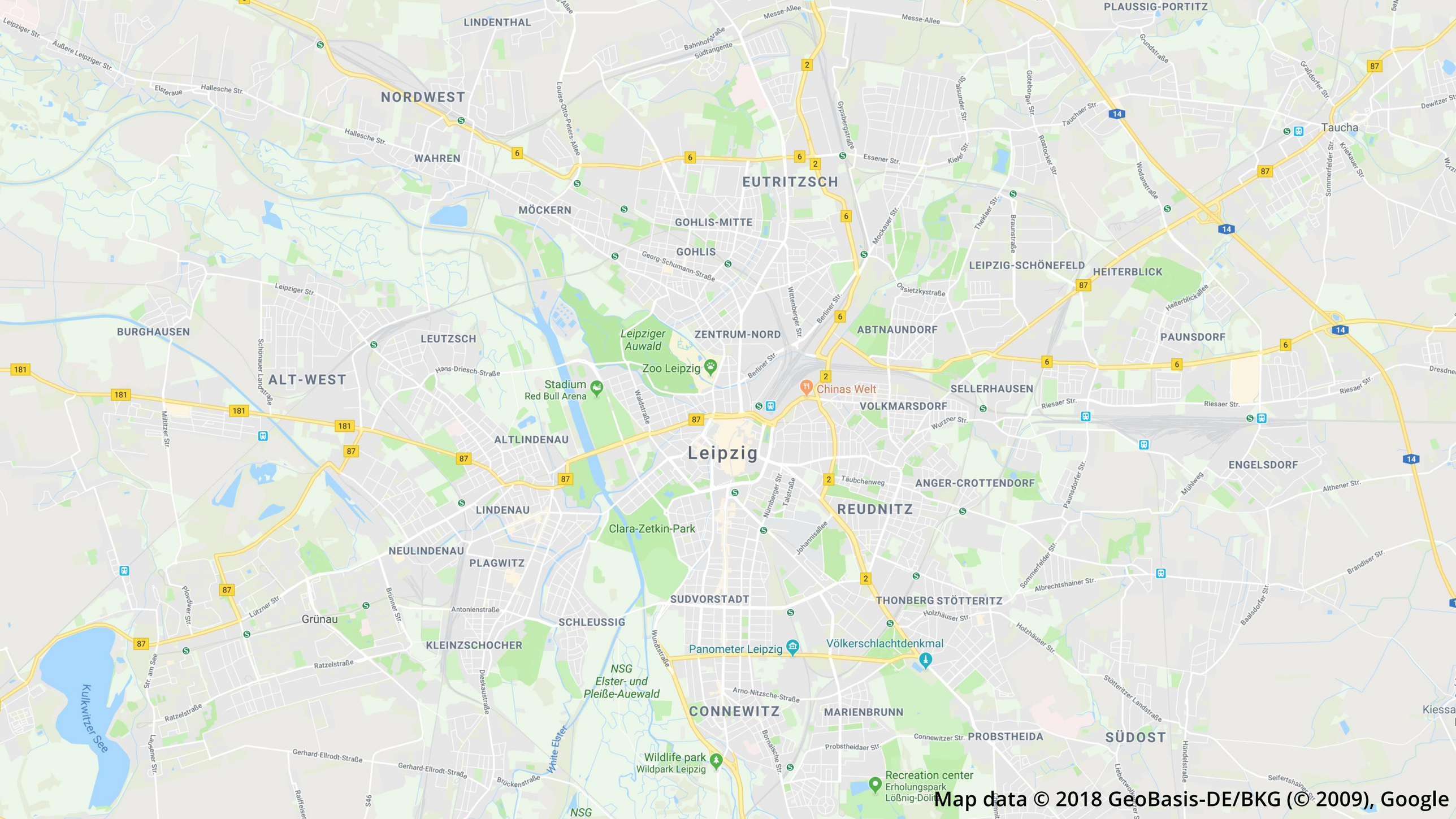
~~Un~~intended Consequences?

THE GUARDIAN ›

Greyball: how Uber used secret software to dodge the law

JULIA CARRIE WONG MARCH 04, 2017

Uber's annus horribilis continued apace Friday, as it was hit with revelations of a secret program to evade law enforcement, the resignation of another top executive and more allegations of workplace discrimination.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CONNEWITZ
MARIENBRUNN
PROBSTHEIDA
SÜDOST
Kulkwitzer See
White Elster
Wildlife park
Wildpark Leipzig
Recreation center
Erholungspark
Taucha
Map data © 2018 GeoBasis-DE/BKG (© 2009), Google

Google/Waymo self-driving car in Tempe

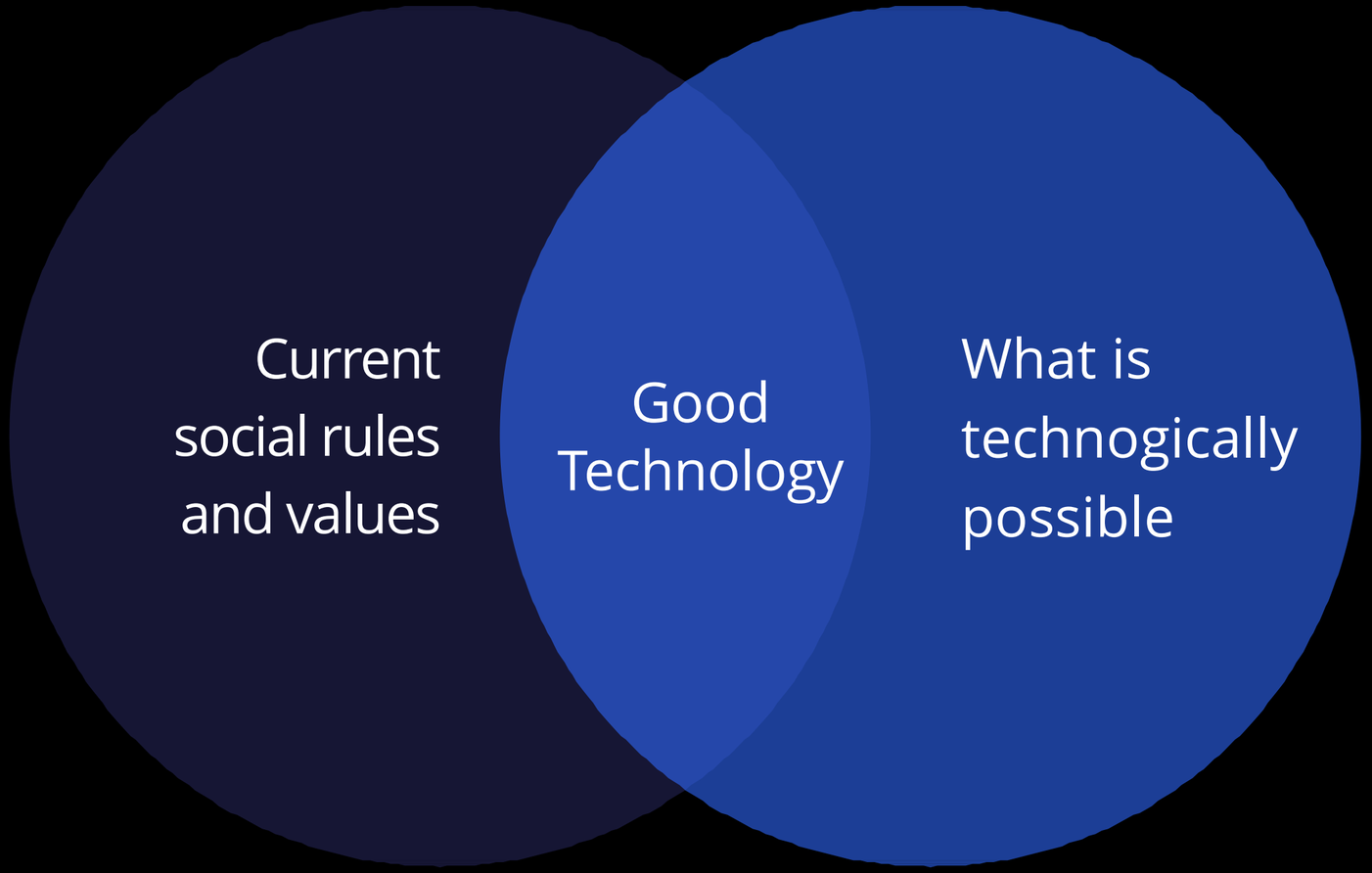
Who Designs these Products?

Who Designs these Products?

Who Designs these Products?

Us

Solution Space of Good Technology



Good Technology Standard

Easy to use, practical guidelines that help organizations to ensure that good products are being developed

Adopting the Standard

- **All Project Phases**: First Idea, Spec, Implementation
- **All Stakeholders:** Engineers, Designers, Leads, Project Managers, Legal, Executives, ...
- **Organization-Wide Guidelines**

What makes a good product/technology?

01 Empowerment

It empowers its users.

02 Purposeful Product Design

It is build to purpose.

03 Societal Impact

It considers the long-term social impact.

04 Sustainable Product Design

It is sustainable.

01

Empowerment

A good product
empowers its users.

Empower vs. patronize

- Humans have **limited decision making power**
- Technology should **assist humans** to reach their full potential
- We should all **be empowered by the technology** we use on a daily basis

Checklist

- Are we **empowering** our users or **taking responsibility** away?
- Does our product respect **individual choice** and individual preferences?
- Do users feel that **they benefit** from using the product?
- Does it help humans **grow** in anyway (personally, socially, physically)?
- How is the use of AI impacting users' **thinking and reasoning**?

02

Purposeful Product Design

A good product is build to purpose.

Smart Lightbulb

„Smart“

1. Take a product
2. Build a Wi-Fi chip into it
3. Label it smart
4. Make more money!

Intelligent by Design

1. Think about **the purpose** of your product
2. Use **all technologies** available (new and old ones, including AI) to design your product so that it suits the purpose as much as possible
3. **Check for purpose** in each step of the design process

Picture by Jatin Anand (Pexels License)

Checklist

- What is the **purpose** of my product? **Who** is it for?
- Does this product **make sense**?
- Could any feature of my product **distract** users?
- Which features could I **leave** out?
- Are there **more intelligent/efficient solutions** to the problem?
- What is the **long-term product vision**?

03

Societal Impact

A good product considers the long-term social impact.

Checklist

- Are there any negative long-term impacts of the product to society if it would used by **millions of people**?
- Are we taking advantage of **human weaknesses** (e.g. brain hacking)?
- In case of AI: Am I introducing any **biases/discrimination**?
- Could the product be dangerous when **combined with other products**?
- Do the **Black-Mirror litmus test**!

04 Sustainable Product Design

A good product is sustainable.

Checklist

- Are we **unnecessarily limiting the product lifetime**?
- What is the product's **environmental impact**? Are there economically viable **alternative** solutions to reduce that impact?
- Do we rely on environmentally or ethically **questionable suppliers/services** or materials (in case of hardware)?
- For Hardware: Are we using **lower-quality**, more easily breakable materials to achieve only **fractional/minor savings**?

05

Additional Checklists

Data Collection

User Product Education & Transparency

Data Collection

- Are we **collecting any data that we do not need** for our application?
- Can we realize the same application/precision by **collecting fewer data points**?
- How **privacy-intrusive** is the data we collect?
- Are we collecting data **without consent** (even if it is not legally required to do so)?
- Are users fooled into sharing data using **dark patterns**?

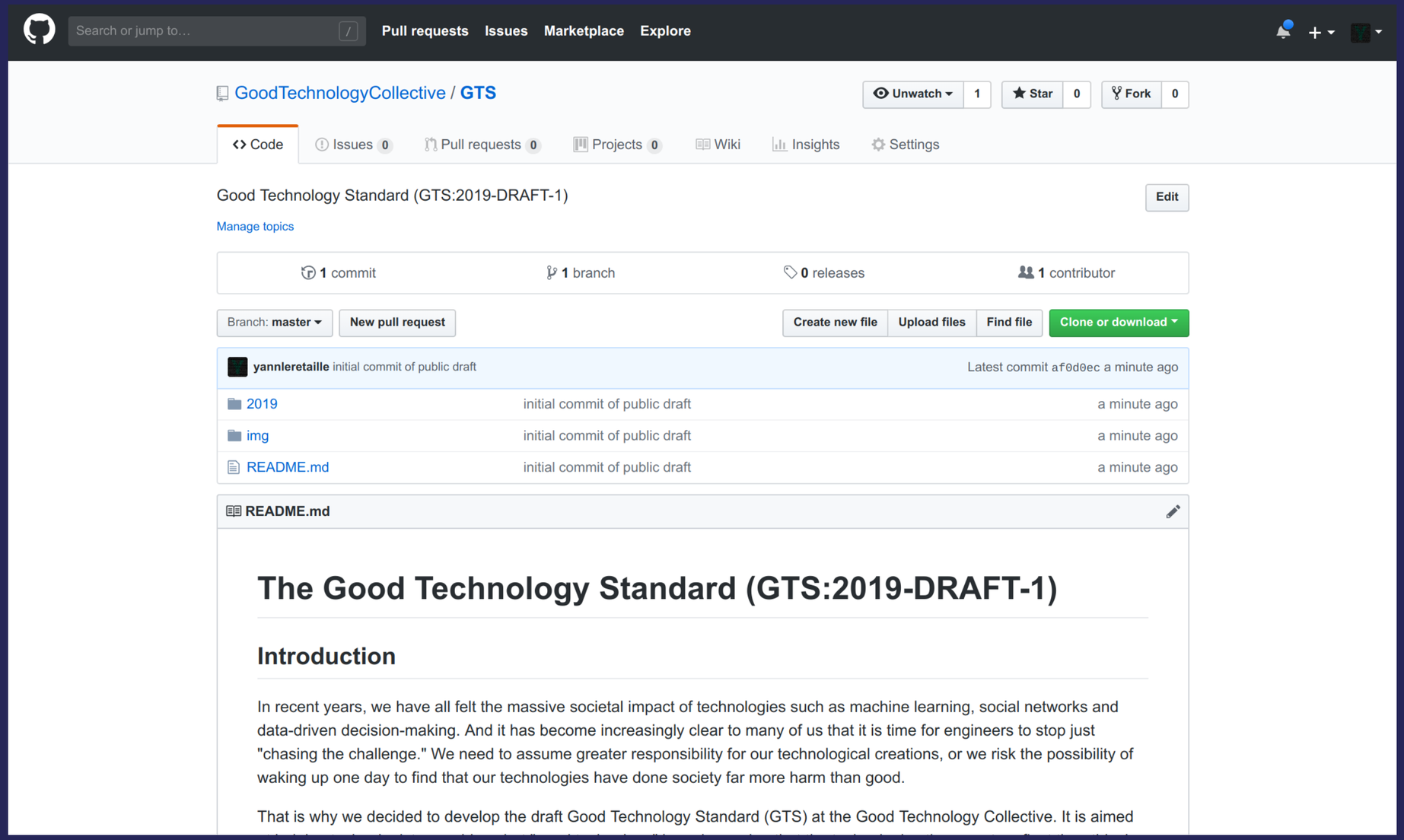
User Product Education & Transparency

- Is the user able to **understand how the product works**?
- Is the user informed when **decisions are made for them**?
- Is the technology behind the product **advertised** in a way that it gives a **false sense** of what the technology actually can do or how it works?

Checklist

- Building a strategy
- Brand awareness campaign
- Demographic and
- Developing a mission statement
- Building audience personas

  Framework for your contentplan



https://goodtechnologycollective.com/standard

Please contribute!

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Chamath Palihapitiya, Former Facebook Executive

“ I feel tremendous guilt.

[...] I think in the back the deep recesses of our minds we knew something bad could happen.

But I think the way we defined it is not like this. It literally is at a point now where i think we have created tools that are ripping apart the social fabric of how society works.”

Thank you.

Let‘s create good technology together.

Q&A