ETHICS & POLICY IN A DIGITAL WORLD

TECH
SO MUCH ROOM FOR ACTIVITIES!

Iron Ox, 1st Autonomous Farm, Can Grow 26,000 Heads Of Lettuce In 1000 Sq. Ft.

- The hydroponic system uses 90% less water & grows 30x more produce than could be grown in 1-acre outdoor farm

- A singular AI manages all robotic growers that sow, harvest, move & water produce with minimal-to-no human oversight

" "We threw a few test images of fish it's never seen before and it's managed to pull those out and differentiate them from the fish it does know about. Once we had that first positive identification of a fish, we really felt we were onto something. From there it was just a matter of finding the right tools to improve and optimise."
– **Dr Shane Penny, Fisheries Research Scientist** "

MIT Neural Network Anticipates Next Actions In Video Given Only A Few Image Frames

- MIT's CSAIL laboratory has created an AI system to estimate temporal relationships between frames & estimate next steps

- The system could be used to monitor human behaviors as a home assistant & predict what their hosts need

TECH
SO MUCH ROOM FOR ACTIVITIES!

ANA AVATAR XPRIZE

Anywhere is possible
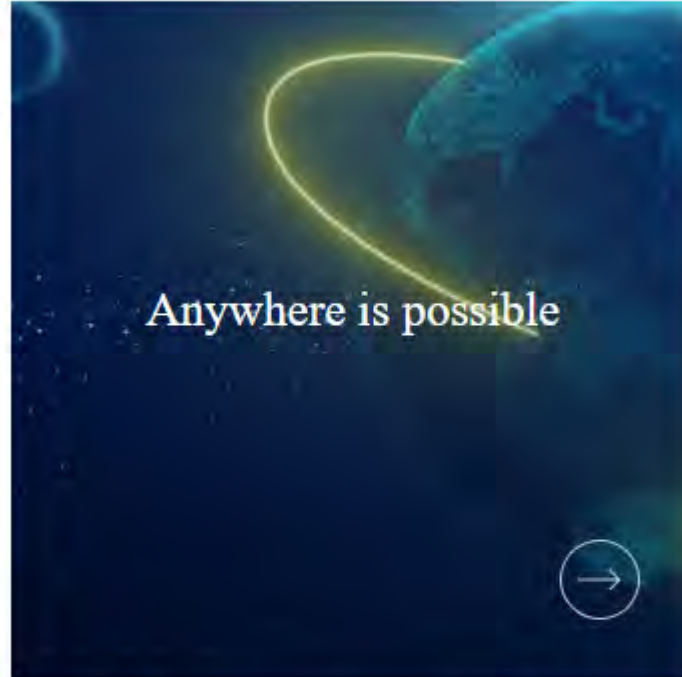
The $10M ANA Avatar XPRIZE is a four-year global competition focused on the development of an Avatar System that will transport a human's sense, actions, and presence to a remote location in real time, leading to a more connected world.
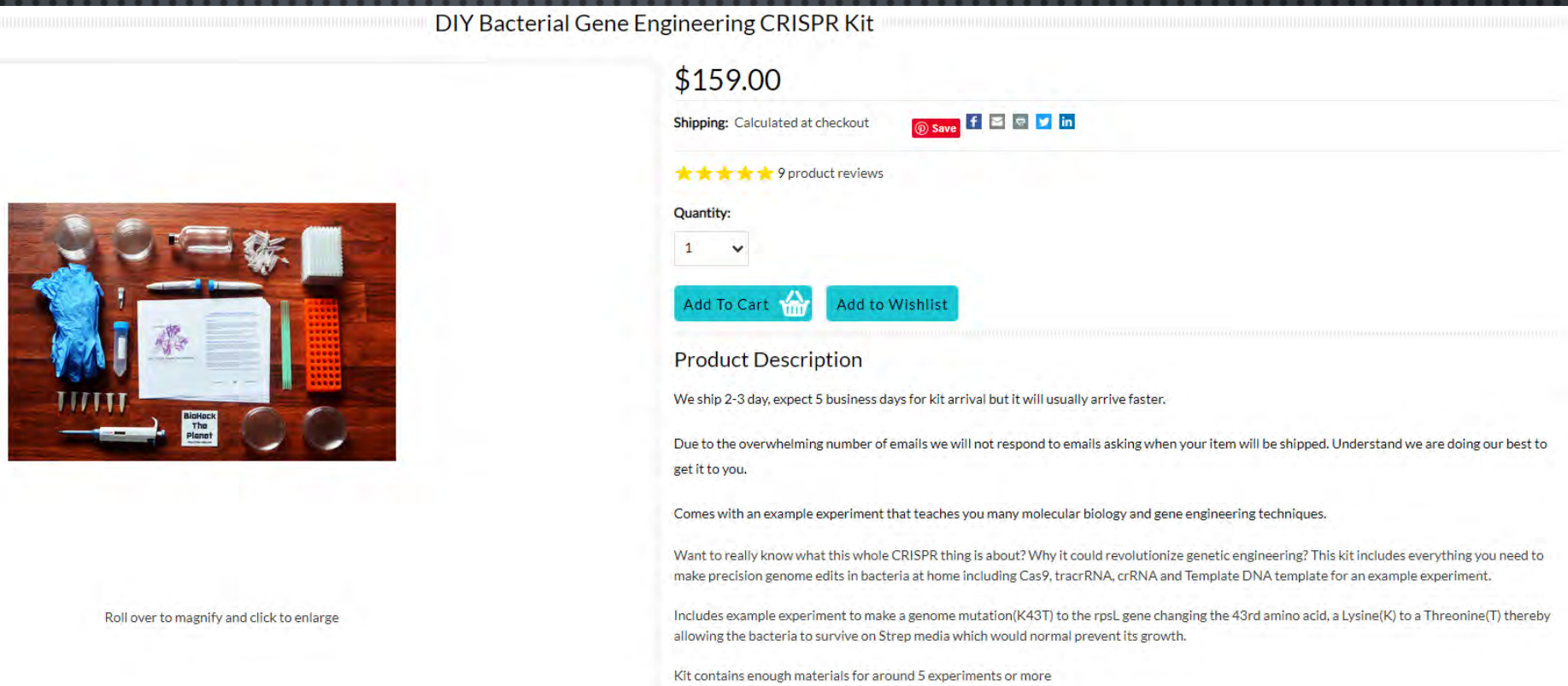
Ford Closes Deal To Use NASA's Quantum Computer For Autonomous Car Research

- The QuAIL's $15M D-wave quantum annealing hardware is designed to catalyze optimization & machine learning problems
- Volkswagen has also used quantum annealing to optimize routes for 10,000 taxis in notoriously traffic clogged Beijing

Soon, though, that could change. In May, Austin began piloting a project to give the homeless a portable, digital identity, hosted on blockchain technology. It's funded by a $100,000 grant to test the idea, and in the running for a $5 million program grant from Bloomberg Philanthropies' Mayor's Challenge. For those whose lives are characterized by impermanence, the city hopes to provide a digital footprint in a system that will exist online—one that can't be deleted, lost, or stolen. One that the individuals can control themselves, and that can be used by homelessness service workers to provide better, more informed aid.

TECH
SO MUCH ROOM FOR ACTIVITIES!

DIY Bacterial Gene Engineering CRISPR Kit

$159.00

Shipping: Calculated at checkout

★★★★★ 9 product reviews

Quantity:
1

Add To Cart   Add to Wishlist

Product Description

We ship 2-3 day, expect 5 business days for kit arrival but it will usually arrive faster.

Due to the overwhelming number of emails we will not respond to emails asking when your item will be shipped. Understand we are doing our best to get it to you.

Comes with an example experiment that teaches you many molecular biology and gene engineering techniques.

Want to really know what this whole CRISPR thing is about? Why it could revolutionize genetic engineering? This kit includes everything you need to make precision genome edits in bacteria at home including Cas9, tracrRNA, crRNA and Template DNA template for an example experiment.

Includes example experiment to make a genome mutation(K43T) to the rpsL gene changing the 43rd amino acid, a Lysine(K) to a Threonine(T) thereby allowing the bacteria to survive on Strep media which would normal prevent its growth.

Kit contains enough materials for around 5 experiments or more

Roll over to magnify and click to enlarge

Baidu Created Neural Network To Sift Through Résumés & Isolate Optimal Applicants

- The Person-Job Fit Neural Network cross references skills with job history to judge relevant experience for the desired role

- The system is likely being used by businesses already, considering Baidu is the world's 2nd largest search engine

MacKenzie Fegan
@mackenzief

I just boarded an international @JetBlue flight. Instead of scanning my boarding pass or handing over my passport, I looked into a camera before being allowed down the jet bridge. Did facial recognition replace boarding passes, unbeknownst to me? Did I consent to this?

TECH
WHY WORRY?

TECH WHY WORRY?

GreenTrumpet · 11h

So wait, you mean that when I tell the airline my name and buy a plane ticket they are going to know who I am !?!?!

What is the big deal here? Who cares if they run your photo through a database. They already have your name, dob and passport number. If they want to run you through a lust of wants and warrants they don't have to use a camera.

People get worked up about the wrong things...

Realest · 4h

Wouldn't it be great if known terrorists could board planes undetected because a few normies didn't want the government to store photos of them...

RedScissors · 8h

It's no different than if you're in public and a police officer recognizes you and arrests you on an outstanding warrant.

Dee Deedee · 12h → OrangePalmtree

It's the government's job to keep the populace safe. What is so wrong with that?

OrangeBus · 10h

If you've got nothing to hide then why be suspicious? I would prefer to be safe because all of the security checks were carried out beforehand and in that time no one had forged a passport and attempted to board a plane illegally or with the intent to harm others.

Reply · Share · 1 Like · 👍 👎

TheBiologyGuy · 1h

Why should I be terrified? biometrics are not a new thing, and if it makes life easier, then great! The only people who should be worried are those with something to hide.

Reply · Share · 👍 👎

TECH
WHY
WORRY?

soulless94 · 2h

oh no, something that would make life easier invaded your "privacy"
privacy?
you are in PUBLIC
there are cameras EVERYWHERE
if you want to not be seen, and not have it be known that you were at any location, doing anything, at any given time....stay inside forever and starve

but for people that don't have to complain about every little thing
this is the kind of convenience i have only dreamed of
sigh
technology is only going to advance, and being afraid of it isn't gonna do you any good
i mean, it's basically already known that if you have a phone, you have no privacy
if you have a computer, you have no privacy
drones are becoming more of a thing
etc.
and even without technology, people have eyes
do you want everybody in the world to not look at you?
i can imagine you going up to random people on the street and screaming "I DON'T GIVE CONSENT FOR YOU TO LOOK AT ME" and they have no idea what you're talking about
acting like they don't even deserve to exist around you, the lowly peasants

now, you could live your life in fear
or you can move on, and get a life
people always wanna bring up these "issues"
and they're non-issues

at the very best, what they've achieved by complaining into thin air, is me doing the very same right back at them, out of boredom
because i'm disappointed in what people choose to complain about
97% of the time, it isn't even anything worthwhile, or interesting
like, please, get some actual material
the world is not going to end

Reply · Share · 👍 👎

TECH

YES, DO WORRY

GoldApple · 11h

I have a face that gets me mistaken for other people ALL THE DAMN TIME. I rather show my photo ID to prove I am me than to trust software that is suppose to identify my face. What if I get a scar that distort my image, am too bloated, lost too much weight. No, identify me with my damn ID, not some dodgy software that may mistake me for someone else.

PurpleSnow · 7h ↱ BlueBug

It's not a matter of whether the government has your photo, it's a matter of who they're sharing it with. Once all of these databases are tied together, you can say goodbye to your liberty.

OliveScooter · 10h ↱ WiR3D

The concern isn't that the govt has my photo...it's that the govt is sharing it with private companies without my knowledge or consent.

OrangeAnchor · 12h

This will be in every walmart secuirty camera and every mall in 10 years. No big deal, unless the ring wing gets its way and being gay or left wing is suddenly a crime, then a lot of us are gonna regret ignoring this.

CyanButton · 12h ↱ OliveFries

What if the person is traveling domestically without a passport? What happens then? Still in the database? Still being unnecessarily scrutinized? Of course, they are. Who gets the blame then?

azweepe · 11h

No government ever used secretly obtained data against it's citizens. No worries!

BlueBus · 11h

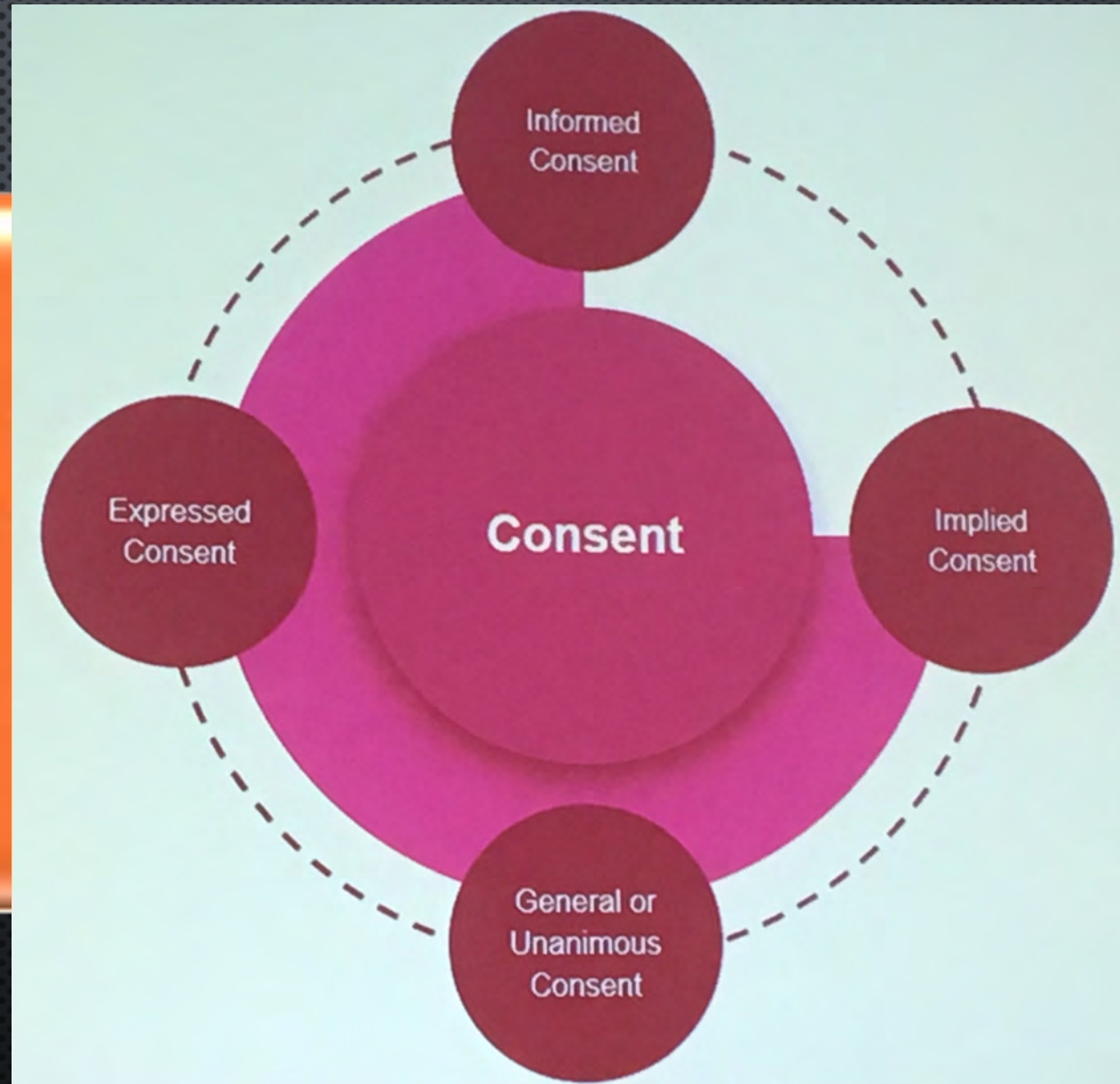Now go watch the movie"Minority report"

TECH
YOU'RE JUST PARANOID

NOT ALL ANIMALS WOULD MAKE IT PAST FOCUS GROUP TESTING

TECH
ERRORS &
BIAS

TECH
CONSENT

TECH
PRIVACY VERSUS PUBLIC INTEREST

THE ORIGINS of TOTALITARIANISM

HANNAH ARENDT

TECH DECISION MAKING
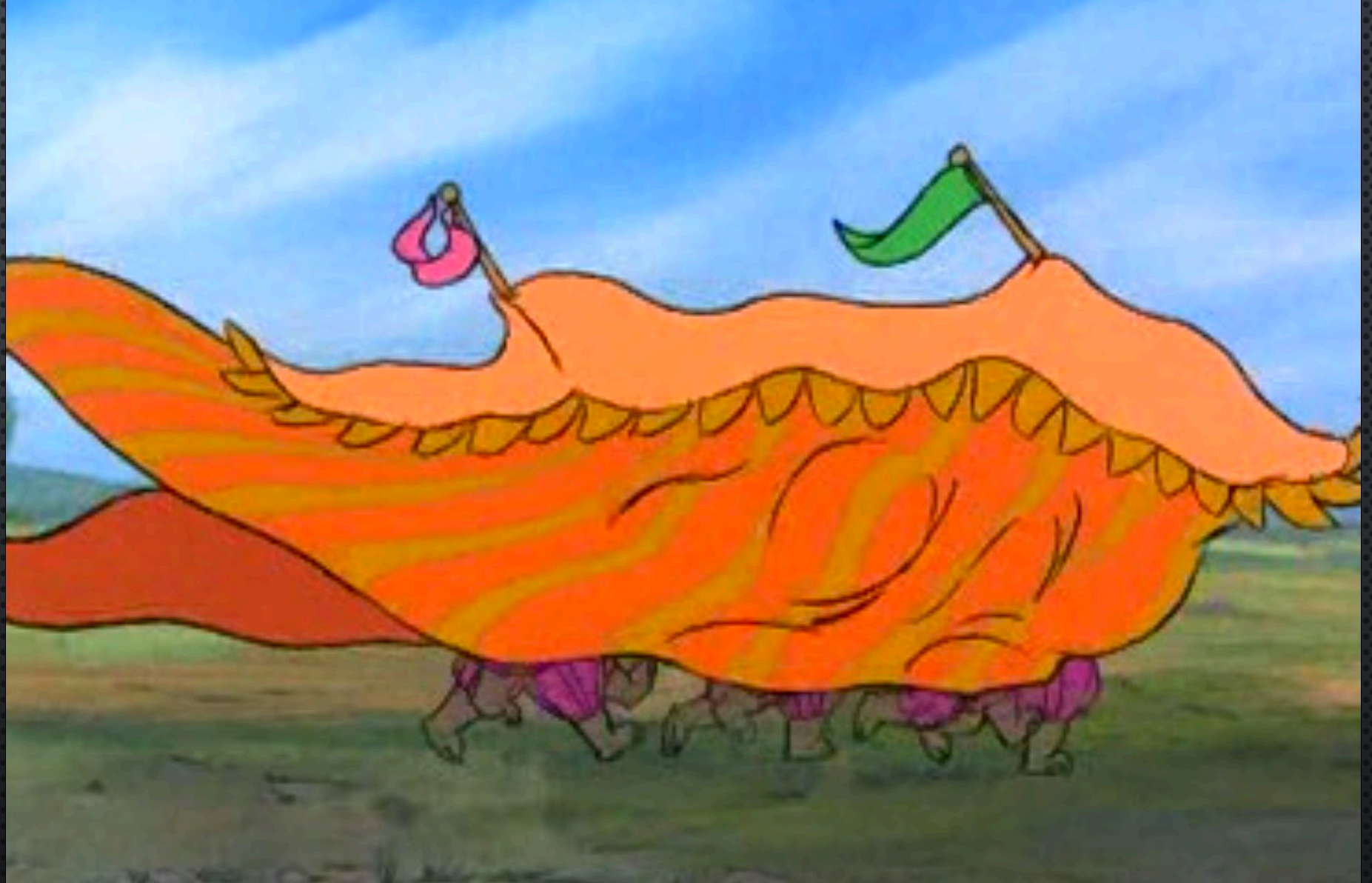
TECH
PATH DEPENDENCE & GOOD GOVERNANCE

TECH
IS IT TOO LATE?

ETHICS & BEYOND
THINGS TO THINK ABOUT

OUGHT BEFORE CAN - The fact that we can do something does not mean that we should

NON-INSTRUMENTALISM - Never design technology to which people are merely a part of the machine

SELF-DETERMINATION - Maximise the freedom of those affected by your design

RESPONSIBILITY - Anticipate and design for all possible users

NET BENEFIT - Maximise good, minimise bad

FAIRNESS - Treat like cases in a like manner; different cases differently

ACCESSIBILITY - Design to include the most vulnerable user

PURPOSE - Design with honesty, clarity and fitness of purpose

Dr Simon Longstaff AO, Executive Director of The Ethics Centre

ASILOMAR AI PRINCIPLES

1) **Research Goal:** The goal of AI research should be to create not undirected intelligence, but beneficial intelligence.

2) **Research Funding:** Investments in AI should be accompanied by funding for research on ensuring its beneficial use, including thorny questions in computer science, economics, law, ethics, and social studies, such as:
- How can we make future AI systems highly robust, so that they do what we want without malfunctioning or getting hacked?
- How can we grow our prosperity through automation while maintaining people's resources and purpose?
- How can we update our legal systems to be more fair and efficient, to keep pace with AI, and to manage the risks associated with AI?
- What set of values should AI be aligned with, and what legal and ethical status should it have?

3) **Science-Policy Link:** There should be constructive and healthy exchange between AI researchers and policy-makers.

4) **Research Culture:** A culture of cooperation, trust, and transparency should be fostered among researchers and developers of AI.

5) **Race Avoidance:** Teams developing AI systems should actively cooperate to avoid corner-cutting on safety standards.

6) **Safety:** AI systems should be safe and secure throughout their operational lifetime, and verifiably so where applicable and feasible.

7) **Failure Transparency:** If an AI system causes harm, it should be possible to ascertain why.

8) **Judicial Transparency:** Any involvement by an autonomous system in judicial decision-making should provide a satisfactory explanation auditable by a competent human authority.

9) **Responsibility:** Designers and builders of advanced AI systems are stakeholders in the moral implications of their use, misuse, and actions, with a responsibility and opportunity to shape those implications.

10) **Value Alignment:** Highly autonomous AI systems should be designed so that their goals and behaviors can be assured to align with human values throughout their operation.

11) **Human Values:** AI systems should be designed and operated so as to be compatible with ideals of human dignity, rights, freedoms, and cultural diversity.

12) **Personal Privacy:** People should have the right to access, manage and control the data they generate, given AI systems' power to analyze and utilize that data.

13) **Liberty and Privacy:** The application of AI to personal data must not unreasonably curtail people's real or perceived liberty.

14) **Shared Benefit:** AI technologies should benefit and empower as many people as possible.

15) **Shared Prosperity:** The economic prosperity created by AI should be shared broadly, to benefit all of humanity.

16) **Human Control:** Humans should choose how and whether to delegate decisions to AI systems, to accomplish human-chosen objectives.

17) **Non-subversion:** The power conferred by control of highly advanced AI systems should respect and improve, rather than subvert, the social and civic processes on which the health of society depends.

18) **AI Arms Race:** An arms race in lethal autonomous weapons should be avoided.

19) **Capability Caution:** There being no consensus, we should avoid strong assumptions regarding upper limits on future AI capabilities.

20) **Importance:** Advanced AI could represent a profound change in the history of life on Earth, and should be planned for and managed with commensurate care and resources.

21) **Risks:** Risks posed by AI systems, especially catastrophic or existential risks, must be subject to planning and mitigation efforts commensurate with their expected impact.

22) **Recursive Self-Improvement:** AI systems designed to recursively self-improve or self-replicate in a manner that could lead to rapidly increasing quality or quantity must be subject to strict safety and control measures.

23) **Common Good:** Superintelligence should only be developed in the service of widely shared ethical ideals, and for the benefit of all humanity rather than one state or organization.

ETHICS & BEYOND
THINGS TO THINK ABOUT

Don't outsource your thinking

Can versus should

Design *with* those impacted

Radical transparency

Someone has to be responsible

Consent – clear, nuanced and revocable

Consult all animals when running scenarios

Exit plan / recourse

THANK
YOU

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