

Mind blowing technologies of the present and the future

Introduction

Thrash out the difference

Digital natives — born during or after the general introduction of digital technology; because they have interacted with digital technology from an early age, digital natives have a greater understanding of how it works.

Digital immigrant – somebody born before digital technology existed, and who has had to learn about it and use it in later in life....

[profoundly alter the brains, drift away from fundamental social skills, insular people, produce an instant response to online messages, ...]

Main part

Varieties of mind blowing technologies

- **artificial intelligence:** technologies that enable computers to perform a variety of advanced functions, including the ability to see, understand and translate spoken and written language, analyze data, make recommendations, and more.

[ALEXA, SIRI, get more intelligent, exhibit traits associated with a human mind]

- **brain computer interfaces:** acquire brain signals, analyze them, translate them into commands that are relayed to output devices that carry out desired actions

[control by thinking, implant a chip into the brain, compete with super intelligent robots, rewire brain patterns ...]

- **3d printing:** an additive process whereby layers of material are built up to create a 3D part.

[a cutting edge option, stack and fuse layers of material, create complex geometries, a virtual design of the object, breaking down the model into layers, every slice of the model is printed layer by layer, 3d printed organs,]

- **living robots:** life forms, known as xenobots.

Formed from the stem cells of the African clawed frog (*Xenopus laevis*) from which it takes its name, xenobots are less than a millimeter (0.04 inches) wide. The tiny blobs were first unveiled in 2020 after experiments showed that they could move, work together in groups and self-heal.

[made of a real living tissue, revolutionize medicine, tiny programmable organisms, move independently,]

- **augmented reality:** an enhanced, interactive version of a real-world environment achieved through digital visual elements, sounds, sensory stimuli via holographic technology.

[AR glasses, AR contact lenses, add digital elements over real-world views, get a preview of ...,]

- **tactile virtual reality:** uses electric actuators, hydraulics, pneumatics for devices, gives sensations to feel solid objects by applying pressure or resistance

[haptic feedback, simulation programs, practicing complicated surgery, feel resistance of body tissues, stimulate an artificial sense of touch, gamepads — electric motors give feedback vibrations, ...]

- **self-driving vehicles:** use a combination of sensors, cameras, radar and artificial intelligence (AI) to travel between destinations without a human operator.

[autonomous car, driverless car, no steering wheel, no pedals, create more efficient roads, contain driver assistance features, lane tracking, cruise control, automatic start-stop, ...]

- **hyperloop:** ultra-high-speed public transportation system in which passengers travel in autonomous electric pods at 600+ miles per hour.

[travel at hypersonic speeds, ultra-speed trains, commute via a tube above or below the surface, giant low-pressure pipes ...]

Conclusion

These are just a few of the mind-blowing technologies currently in development. Whether you're a technophobe or a technophile, one thing is for sure – this is just the tip of the iceberg for what technology can achieve.

Recommended vocabulary

computer mouse
 car airbags
 bar codes
 hand-held mobile phones
 automated teller machine (ATM)
 magnetic compass
 clothing buttons
 ice skates
 digital native
 age
 digital immigrant
 luddite
 early adopter
 late adopter
 a technophobe
 a computer nerd

to interact with digital technology from an early
 to alter people's brains
 to produce an instant response

to have a damaging effect on

artificial intelligence

to pop up on the screen

to build stuff in factories

to analyze financial reports

to act as virtual nurses for patients

to pick up radioactive waste

brain computer interfaces

to implant a chip into one's brain

to communicate with computers

to compete with robots

3d printing

3d printing fashion accessories

3d printed rockets

cutting edge

to detect faults in the design

living robots

to revolutionize medicine

to assemble sth

tiny programmable organisms

augmented reality

to overlay digital images onto real life backgrounds

AR glasses / contact lenses

to get a preview of...

tactile virtual reality

haptic feedback

sense transmitters

VR experience

To be tested for...

self-driving vehicles

on the market

level 5 automation

fleets of self-driving vehicles on the road

to reduce congestion and pollution

to make parking lots obsolete

to free up space for

drone taxis

hyperloop

at a speed

to travel at hypersonic speeds

zero carbon impact

low air pressure

hydrogen power

The hunt is on for alternatives.
fossil fuels
Hydrogen fuel
a hydrogen vehicle
To run on hydrogen
to put it into pure form
flammable
to store hydrogen
the power of the future
energy-storing bricks
solar panels
carbon neutral living
iron oxide
rechargeable
to directly turn the sun's heat into energy
in its early stages
in their infancy
quantum computing
to calculate a lot faster
quantum mechanics
to use quantum bits / qubits
in a fraction of a second
to give data encryption with perfect security
to give accurate weather predictions
to make a quantum leap forward