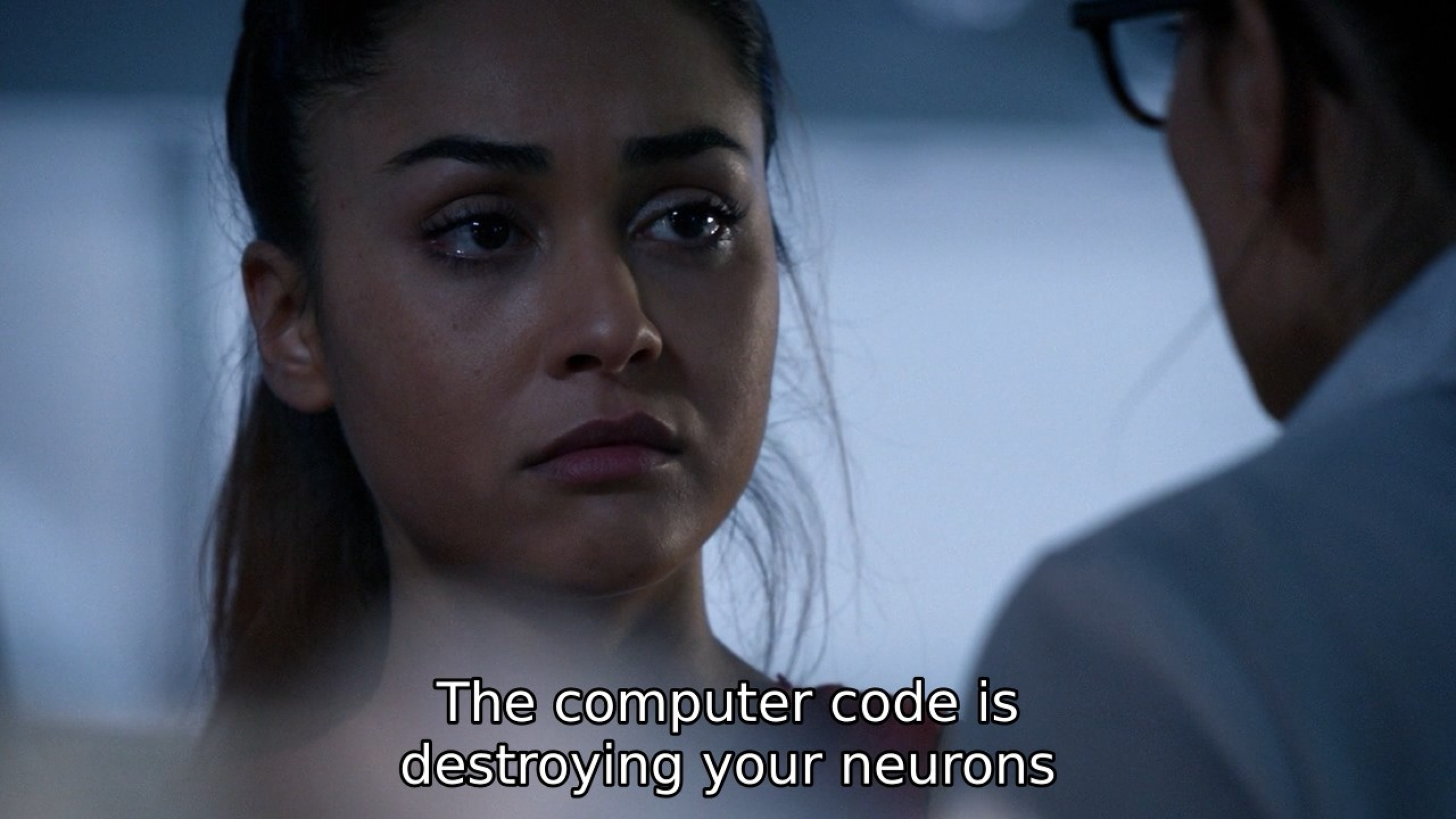
What do we

# REBOOT?


The computer code is
destroying your neurons

belastingdienst

funding applications

my great art

talk for reboot.txt

# Doris believed herself the most "fully formed" character in the office.

## Until she became an Orange Micro Printer Expert.

**Printers Can Be Confusing.** Sometimes, even the informed personal computer owner is caught short by the mound of technical differences in printers. Had Doris come to Orange Micro sooner, she'd know a *fully-formed character* was similar to the crisp, solid typestyle that came from her office typewriter.

**We Educate First.** With so many different printers out there with as many different features, we feel a printer education is in order. We take what you already know about computers and explain printers in the same terms. Our current customers seem to like that because of the friends they refer. (Nearly 50% of our business is referral.)

**It's Easy To Be An Expert.** Orange Micro printer specialists are there to make you feel comfortable with your newfound printer knowledge. And when you decide on the printer right for you, you'll know exactly why you picked it from all the rest. With over 35 popular models to choose from, and a complete selection of cables, options and interface accessories, we have everything you need to get your new printer up and operating in minutes.

**We Have The Right Printer For You.** Bring along your toughest printer questions. Our salespeople will answer them honestly and practically. In less time than you'd imagine possible, you'll be a printer expert too! After all, printers are our only business, so we always do a better job at finding the right one for you.

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Sherman Oaks, CA 91423 (213) 501-3486
3216 Scott Boulevard
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**Limited Franchise Opportunities Now Available. Call (714) 630-3620.**

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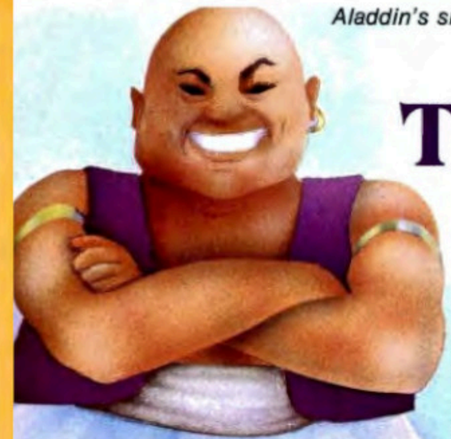
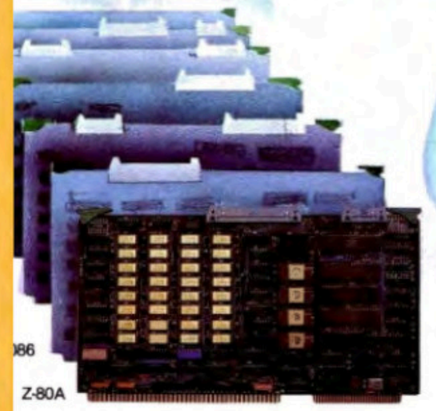
*Aladdin's slave was pretty good . . . but ours is even better.*

MBI Introduces

# The PERFECT SLAVE™

APM™ Multibus* and CP/M† compatible





Z-80A

At MBI, we think a slave shouldn't have to rely on the system master. That's why we created The Perfect Slave — the first intelligent slave board containing *everything* you need to run software, even an "operating system." No bootstrapping or additional boards are required, which means you save time and money.

- Z-80A‡
- 4 MHz
- 256K RAM (dual port)
- 4 Serial I/O ports (to 38.4K BAUD)
- 2 Parallel Ports (configurable)
- 4 28-Pin ROM Sockets (1K-32K)
- 4 Clocks (programmable)
- Bank Select
- Byte or Word Accessible
- Operating System

The Perfect Slave allows you to . . . perform background processing . . . overlap I/O functions . . . double buffer I/O . . . and expand memory while adding full I/O and processor. A special feature of The Perfect Slave, dual ported memory, enables you to perform high speed data manipulations for 8 or 16 Masters.

**Special Evaluation Price: $1295**

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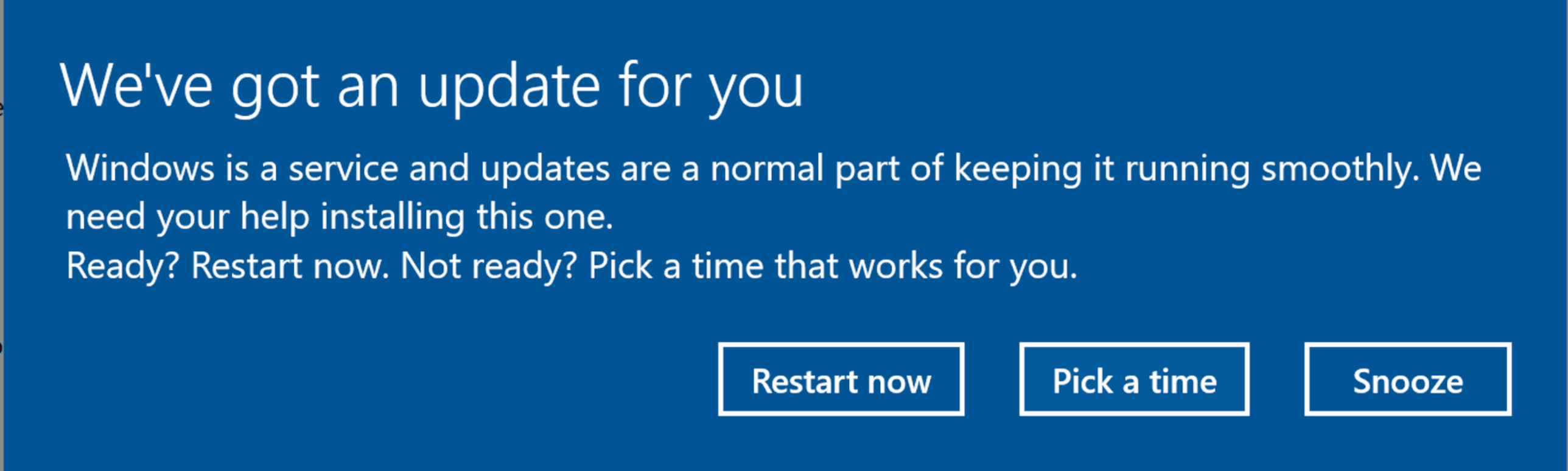
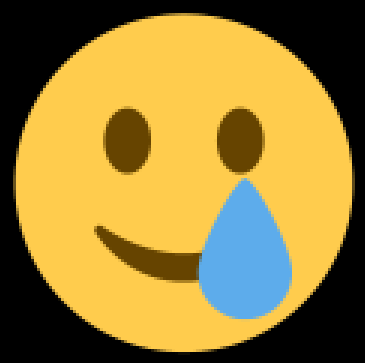
Circle 235 on Inquiry card.


We've got an update for you
Windows is a service and updates are a normal part of keeping it running smoothly. We need your help installing this one.
Ready? Restart now. Not ready? Pick a time that works for you.
Restart now
Pick a time
Snooze

# CRAPPY EVERYDAY TECH BINGO

| | | | | |
|---|---|---|---|---|
| can't unlock my car with the app, phone charger is in the car | new slower version of previously working applications, old applications forced to stop working | overwhelming productivity apps | e-documents explosion<br><br>still need physical actual paperwork on top | QR codes for everything, everywhere, including places without internet |
| headphone jack gone | your name is invalid | software update is required<br><br>unable to start car, toothbrush, fridge | lost eyesight because my bionic eye is no longer supported | Everything IoT |
| forgot password manager password | can't SMS code to pay phone bill because phone service hass been cut off |  | enthusiastic Miro pushers | software auditing |
| hardware auditing | laptop leg burns | mindfulness app | clamshell design that is impossible to disassemble without damage | $100 dongle required for USB, HDMI, Ethernet, etc |
| the CEO is suddenly really into crypto, and so should you, and NOW | what's the pad URL? | USB cables and standards | everything is a website | a multinational corporation's service as the easiest way of copying files between two nearby devices |

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The Free Encyclopedia

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Learn to edit
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Print/export
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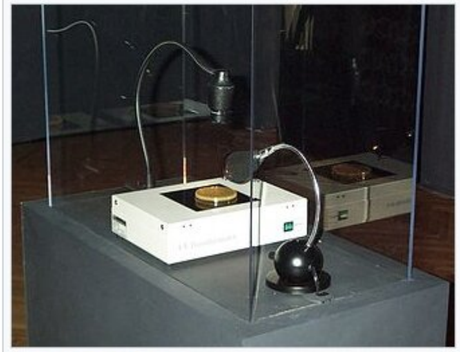
In other projects

# New media art

From Wikipedia, the free encyclopedia

**New media art** includes artworks designed and produced by means of electronic media technologies, comprising virtual art, computer graphics, computer animation, digital art, interactive art, sound art, Internet art, video games, robotics, 3D printing, and cyborg art. The term defines itself by the thereby created artwork, which differentiates itself from that deriving from conventional visual arts (i.e. architecture, painting, sculpture, etc.). New Media art has origins in the worlds of science, art, and performance. Some common themes found in new media art include databases, political and social activism, Afrofuturism, feminism, and identity, a ubiquitous theme found throughout is the incorporation of new technology into the work. The emphasis on medium is a defining feature of much contemporary art and many art schools and major universities now offer majors in "New Genres" or "New Media" and a growing number of graduate programs have emerged internationally.[1] New media art may involve degrees of interaction between artwork and observer or between the artist and the public, as is the case in performance art. Yet, as several theorists and curators have noted, such forms of interaction, social exchange, participation, and transformation do not distinguish new media art but rather serve as a common ground that has parallels in other strands of contemporary art practice.[2] Such insights emphasize the forms of cultural practice that arise concurrently with emerging technological platforms, and question the focus on technological media per se. New Media art involves complex curation and preservation practices that make collecting, installing, and exhibiting the works harder than most other mediums.[3] Many cultural centers and museums have been established to cater to the advanced needs of new media art.

Newskool ASCII Screenshot with the words “Closed Society II”


Eduardo Kac's installation "Genesis" Ars Electronica 1999

**Contents** [hide]

1 History
2 Themes
2.1 Databases
2.2 Political and social activism
2.3 Afrofuturism
2.4 Feminism and the female experience

LMX. 28/3/2019 France

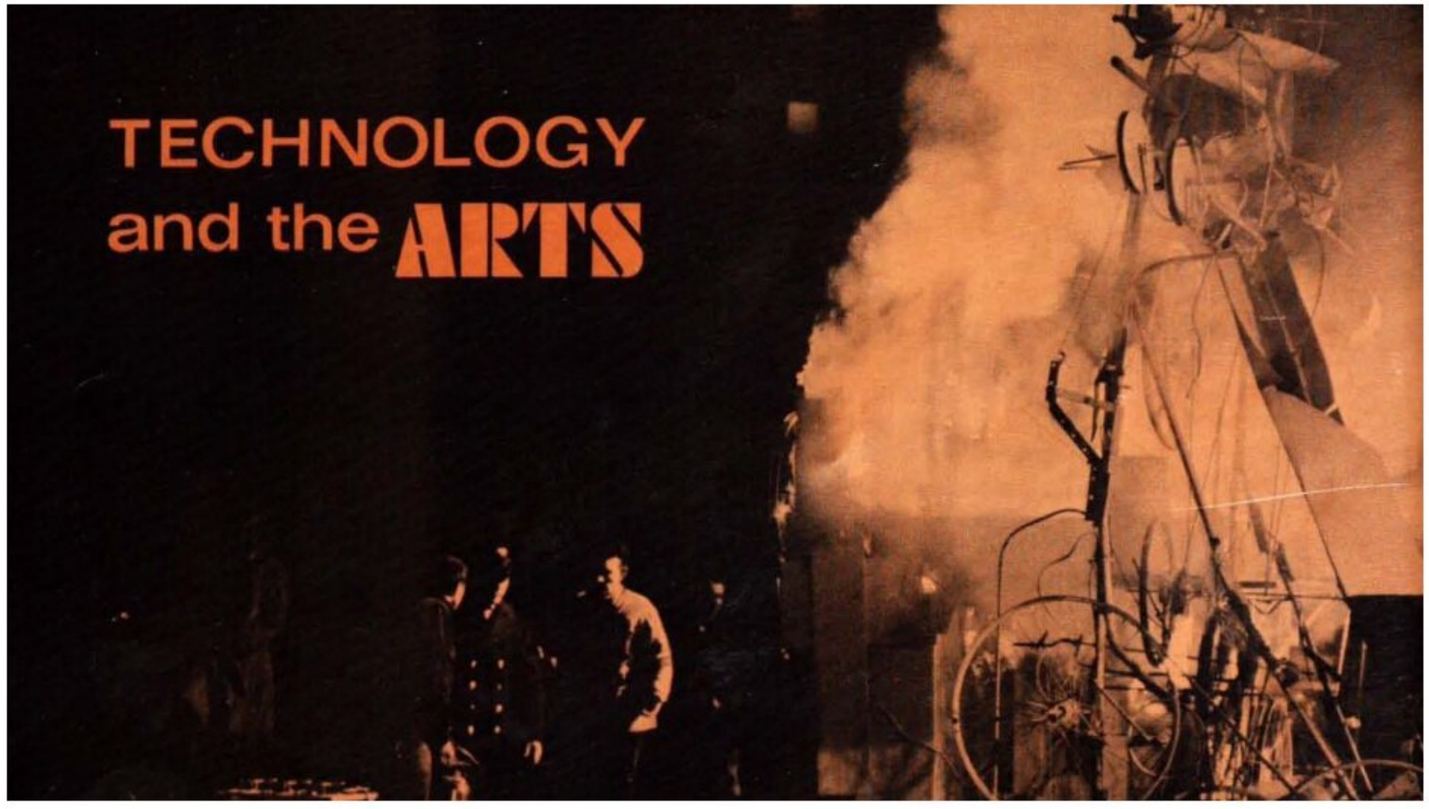
Instagram: Liu.mengxia

INSTRUMENT/MEDIA

The genesis of E.A.T.

# A pioneering collaboration of artists and technologists

The E.A.T. program is going strong after more than 50 years. Check out what our collaborators and artists-in-residence are dreaming up with the help of Bell Labs.




**The Experiments in Art and Technology (E.A.T) collective brought together Bell Labs engineers and New York City visual artists, choreographers and composers for *9 Evenings: Theatre and Engineering*, a series of new art-performance works that changed music, theater and the media arts forever.**

Recreation of Andy Warhol's Amiga, based on original objects found in the museum's archives.

Past Project

# Warhol and the Amiga

July 25, 2017–November 1, 2019

July 25, 2017 – November 1, 2019

Join in the conversation and post your thoughts and reactions to the *Warhol and the Amiga* project using #warholAmiga on social media.

In the summer of 1985, Warhol was given his first Amiga 1000 home computer by Commodore International and enthusiastically signed on with the company as a brand ambassador. For their launch, Commodore planned a theatrical performance, which featured Warhol onstage at Lincoln Center with rock 'n' roll icon and lead singer of Blondie, Debbie Harry. In front of a live audience, Warhol

a view to remember:
SONY

## The Professional Exhibition

This year there were about 100 participants, of which I would like to point out the following: Graphic workstation manufacturers: Digital Equipment, Intergraph, SiliconGraphics. Two-D and 3-D software publishers: Alias Wavefront, Animation Science Corp. Autodesk, Discreet Logic, Softimage. Three-D object database publishers: Rem Infografica, Viewpoint DataLabs; Suppliers of motion capture systems: Motion Analysis Corp., Qualisys AB. Hardware suppliers : Barco, Tektonix Theta Scan. Regional and institutional companies: ElectricitÈ de France ( EDF), VallÈe de l'Image (The Regional Council of Burgundy); TV stations: Canal +.

## Pixel-INA Awards

More than 500 works from almost 30 countries were entered in this competition. The Imagina jury selected 67 works to be screened, representing the production of 25 different countries.

## Jury Prizes

Grand Prix Imagina: *Joe's Apartment: Funky Towel* by Jon Payson and Chris Wedge (Blue Sky Studios), USA. Media Prize for Best European Creation: *Superstition* by Ray Spencer and Sylvain Delaine (New Wave International/Movida), Belgium. Special Jury Mention: *Tian An Men* by Buf Compagnie, Pasquale Croce & Arnaud Lamorlette (Buf Compagnie), France. 3-DAnimation: *Mars Attacks* by Tim Burton and Industrial Light & Magic (Tim Burton/Larry Franco), USA.

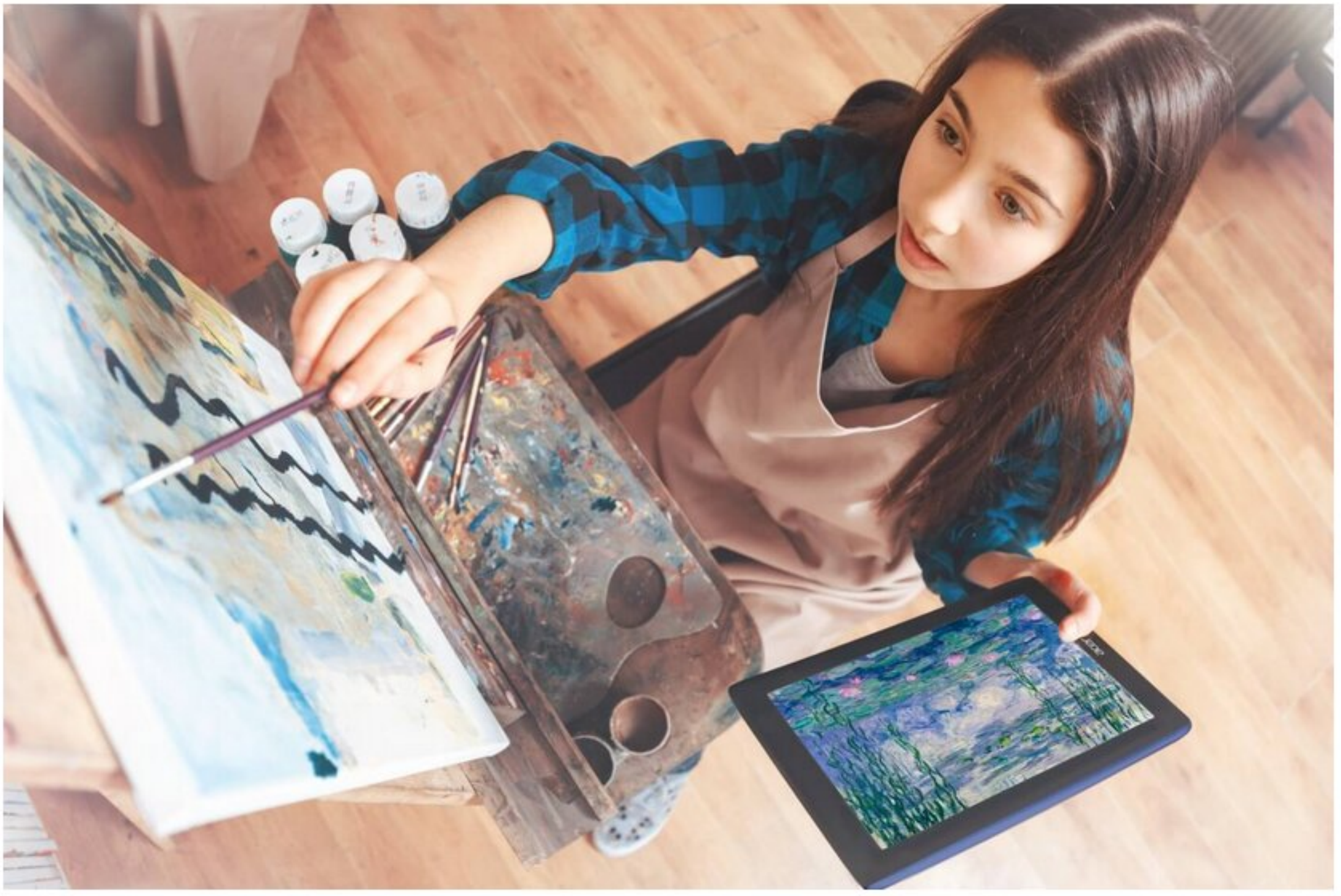
## The Pixel-INA prizes based on votes by attendees at the end of the two official conference screenings (10 categories):

Music Video: *Whatever You Want* (Tina Turner) by Stéphane Sednaoui (Propaganda Communications) & Stéphanie Lang (Cinesite Europe), (Propaganda Communications), UK.
Credits: *Homage to Jessie Owens & Carl Lewis* by Pitof Duboi

# Art Classroom: how technology is changing it

STEAM

21/05/2019



With the growing importance of technology in our lives, students are being told more and more often that art is not profitable and will not help their career and that they should focus exclusively on science and technology if they want to secure a high-paying job, or any job at all. This implies that art and technology are incompatible, but the truth of it is that **the separation between technology and the arts is a false dichotomy and the two can be gainfully used together**.

GOOGLE / REPORT / DESIGN

# DevArt: Google's ambitious project to program a new generation of artists

Dev Art

/ You could be the star of a major new exhibition

By AARON SOUPPOURIS

Feb 5, 2014, 3:00 PM GMT+1 | 0 Comments

*If you buy something from a Verge link, Vox Media may earn a commission.* ***See our ethics statement.***

Your work could be at the heart of one of the largest digital art exhibitions the world has ever seen, thanks to a collaboration between London's Barbican Centre and Google.

The exhibition is called *Digital Revolution*, and from July 3rd to September 14th it will explore the impact of technology on art over the past 40 years. It will feature artists, designers, musicians, architects, and developers to reveal the artistry that's all around us, from the films that we watch to the games that we play. DevArt, its final act, will showcase three large-scale, "magical" works of art from established

EPIC

GAMES

# Why is Palantir sponsoring the Dimensions art exhibition in Leipzig?

*More than 900 signatures*

Palantir is a US-based data analytics company whose business model seems to be the pushing and exceeding of any ethical and legal boundaries that stand in the way of a fully “transparent humanity”. Some questions come to mind. What was the reasoning behind

INSTRUMENT
+
MEDIA

INSTRUMENT
+
MEDIA

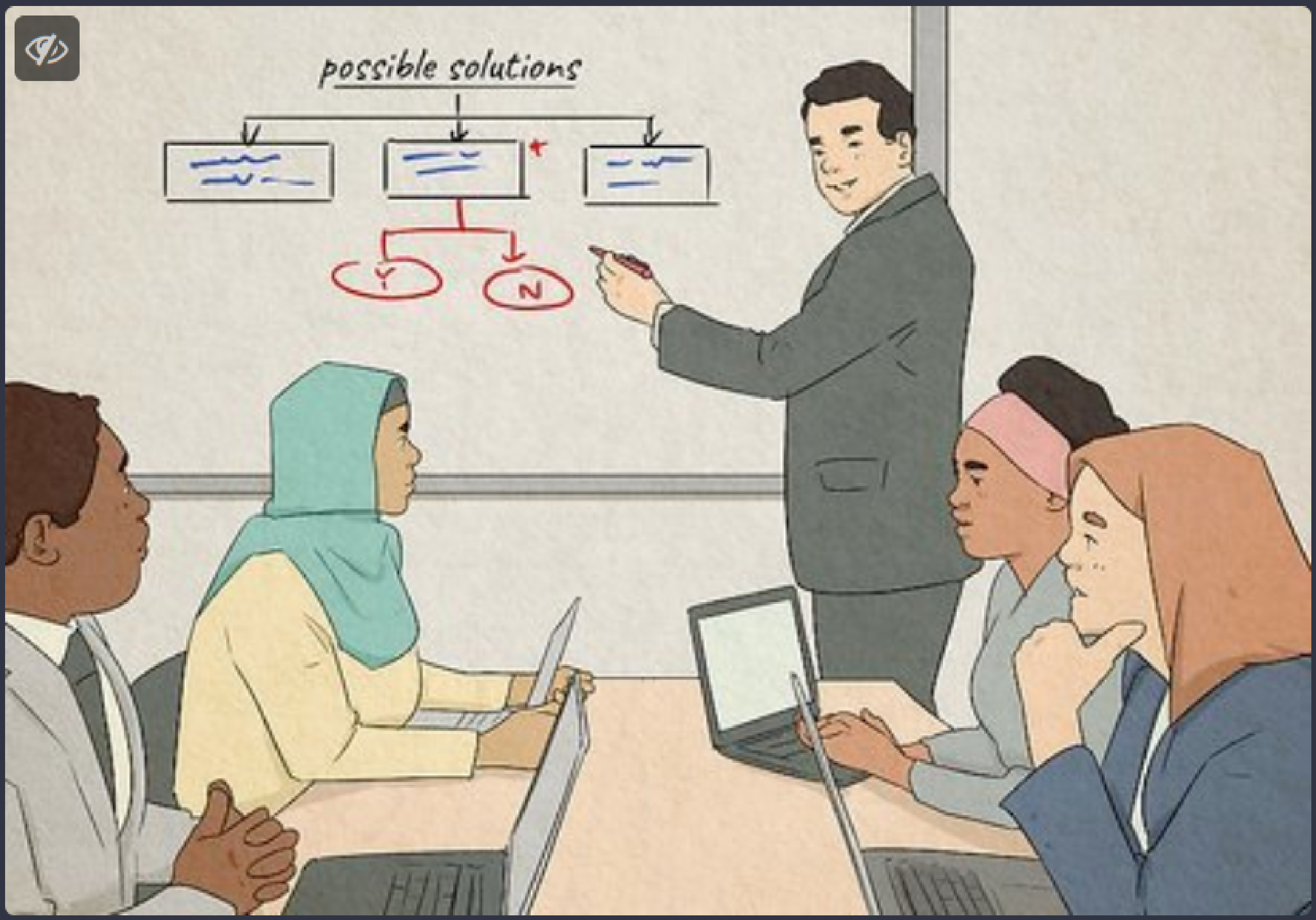
INSTRUMENTALISATION
+
SITUATEDNESS

THIS IS FINE.

MESMERIZING
AESTHETICS

**how to do anything**
@wikihow@mastodon.social

# How to Pick Good Minecraft Servers




Feb 16, 2023, 02:23 · · wikibot · 7 · 16

# permacomputing



Welcome to the Permacomputing wiki!

permacomputing.net

# What is this?

## New to permacomputing?

Permacomputing is a more sustainable approach to computer and network technology inspired by permaculture. Permacomputing is both a concept and a community of practice oriented around issues of resilience and regenerativity in digital technology.

In a time where computing epitomizes industrial waste, permacomputing encourages a more sustainable approach, maximizing hardware lifespans, minimizing energy use and focussing on the use of already available computational resources. We do this because humans are part of nature and technology is an extension of humans, and we acknowledge that technology has been used to harm nature. We want to find out how we can practice good relations with the Earth by learning from ecological systems to leverage and re-center existing technologies and practices. We are also interested in investigating what a permacomputing way of life could be, and what sort of

these constraints challenge privileged Western understandings of art, design and culture. These practices exist outside the cultural and creative industries because they are driven by working class struggles, the need to adapt and survive, and to make do with whatever means are available. Relevant elements of discussion can be found in the improvised creative solutions of *Gambiarra* in Brazil[31] or *Jugaad*, applied to concrete problems by repurposing objects and with limited resources, including the unexpected reconfiguration of media saturation in South Asia.[75]

Having briefly established this rather simplistic distinction between self-imposed and external constraints, we reach the point where we must admit, not without some embarrassment, that if we are to use permacomputing as a means to address climate justice and the deceptive maximalist techno-aesthetics to transform art, design and cultural practice, our design constraints will exist in the grey area between these two categories, self-imposed and externally imposed. It would live in a sort of limbo, where an urgency is felt and translated into a practice, but the condition of that practice is not directly threatened or pressured to address that urgency, compared to situations where the urgency is much more tangible *immediately* or *directly* life threatening. This is not to say, of course, that cultural workers in the Global North, and more specifically North America and Europe, are automatically protected from environmental disasters. But they are generally in a more privileged position, both economically and geographically. In effect, this helps

technologies.

Returning to our sketch of constraints in art, design and cultural works, it may now be apparent that as much as permacomputing *truly* values the design constraints as playful and creative,[35] they also act as visible barricades, blockades, and pickets to express and make tangible the contemporary struggles that should not be ignored in the creation of these works. However, permacomputing aesthetics should not be misunderstood as belonging to an aesthetics of obstruction, for it is less concerned with the performative and symbolic dimension of its approach,[10] and is instead rooted in questioning the nature of its underlying process and the generative insecurity of its awkwardness.[78] For this reason, we believe that the aesthetics of permacomputing works always serve as an entry point to make visible and understand a situated intention in the creative process.

In practice, permacomputing exists as two intertwined strands: first, an incentive to reuse and repurpose existing computer technology and materials to create new works; and second, a list of continuously evolving design principles, to guide that very reuse and repurposing, but *also* to inform the development of new software and hardware when reuse and repurposing are not possible or relevant. At the time of writing, only a few works relevant to cultural practices have begun to use the term permacomputing to frame their practice. We will now briefly discuss some of these.

Computationally minimal art (CMA) can be described as an algorithmic art that idealizes low computational complexity as a source

**Figure 1: A bit art rendering of the bytebeat song formula $(t\&t\%255) - (t * 3\&t >> 13\&t >> 6)$. Screenshot, Ville-Matias Heikkilä, 2023**

Uxn is a small virtual machine geared towards small graphical applications, shown in figure 3, with features reminiscent of classic home computers.[48] It differs from most other *fantasy platforms* in its emphasis on low implementation complexity, and it has already been implemented on a variety of platforms including devices such as the Nintendo Gameboy Advance and the Raspberry Pi Pico. Uxn is being developed by Hundred Rabbits, a small artist collective living on a sailboat, as a platform for their own games and programs.

What Remains is a video game developed for the 1985 Nintendo Entertainment System (NES) console.[25] The game is the result of several years of research into the parallels between the manipulation of public opinion on environmental issues in the mid-1980s and today's climate crisis, and the role of whistleblowing in making damage visible.[18] The game subverts the nostalgic expectation of retro-gaming and is distributed by repurposing unwanted and overproduced game cartridges from the late 80s slightly modified to support the new game, shown in figure 4.

**Figure 3: Noodle, a 1-bit illustration program for the Uxn virtual machine. Screenshot, Hundred Rabbits, 2021.**

The Screenless Office is a system for working with media and networks using paper-based output from old laser and receipt printers.[47] A document camera, repurposed warehouse barcode scanners and simple buttons provide input. The system, shown in figure 5, allows reading news, browsing, reading and replying to emails, interacting with social media and playing local or streaming music. The creator frames it as an *artistic operating system*, not intended as a universal solution, but as an expression of the needs and desires of the author. The high latency of interaction and material

permacomputing aesthetics paper (2023)
look it up (it's free)

**Figure 4: A cartridge of the game What Remains, made by player mi213 by repurposing an old game, and following the project DIY instructions. Photography, mi213, 2021.**

awareness of environmental consequences work well with obsolete, low-power hardware and afford a calmer and more reflective pattern of use.

**Figure 6: Exterior view of the Livinglab in Czechia (Barrandien / Cesky kras region), Photography, Michal Klodner, 2022.**

projects may be very strong in some aspects while neglecting others. The idea is that, by forming a community of practice around these two strands—first, an incentive to reuse and repurpose existing computer technology and materials to create new work; and second, a list of continuously evolving design principles, to guide that very reuse and repurposing—there will, we hope, be a process of both individuation and collective learning, mutual aid and inspiration.[86] For instance, in the current design principles for permacomputing,[13] the question of care therefore should extend the care of life in an ecological sense to include the importance of how we relate and talk to each other in a potential permacomputing



## 5 PERMACOMPUTING AND NOSTALGIA

Following these examples and given the fact that permacomputing does not hesitate to promote the reuse and repurposing of old computing devices, or often eschews high-definition sound and visuals, it might seem obvious to associate permacomputing aesthetics with retro-computing. Is this a reasonable assumption? Simply put, no. However, we think it is important to nuance this response. Specifically, because retro-computing practices are so diverse and varied—from modders, hobbyists with disposable income, 8-bit computer collectors, to media archaeologists and hardware hackers—that it may not be the easiest way to begin to outline what is different with permacomputing. We think that a useful detour is to start by talking about nostalgia, time and consumerism.

In societies vastly dominated by technological novelty, economic growth, and technosolutionism, the relationship with time is difficult to dissociate from consumerism. This time, however, is of a peculiar nature. It is the time of quantified and monitored labour, the time of management, organisation and production coordination, and the time of economic cycles. Continuous updates of video games, TV/online series presented in seasons or launches of technological products—all coordinated in the context of strategic moments of increased consumption. Eras and generations are defined, analysed and symbolised by emblematic products of mass consumption. Our short lifespans, treadmill working conditions and short attention spans do not help us see these patterns, and instead support a productive apparatus that favours obsolescence, neophilia, amnesia, non-historicity, as a means to consume and produce more things. In this context, it has been normalised that any use of so-called *outdated* computing devices that have exhausted their economic value, can only be of a nostalgic nature, however such

At the same time, there is an important aspect of retro-computing activities that can also challenge this argument: technical accessibility. It should not be underestimated that for many hackers, artists, designers and modders, the appeal of retro-computing lies in the relatively low-threshold capacity to augment, adapt or tinker with old equipment. From discrete components, socketed chips, annotated PCB layouts, and thick service manuals and schematics, retro-computing turns the maximalist notion of computational *potential* on its head. Even if everything is relative, and that black boxes of the past are just as closed as those of today, old machines are simply easier to take apart and understand. So if permacomputing could be aligned with retro-computing, it would be through some of the retro-computing subcultures that use so-called obsolete technology in radically different contexts because of its plasticity.[44] In addition to technical considerations, permacomputing also resonates with the creative and environmental considerations of zombie media[43]—a counterpoint to the notion of dead media—which acknowledges that "[m]edia kills nature as they remain as living deads", and encourages the reappropriation of electronic waste, drawing an analogy with the processes of reuse found in remix culture. When Jamaican music studio engineers began experimenting with obsolete and abandoned US audio equipment such as spring reverbs in the 1970s, they were not nostalgic for 60s surf music. Instead, these machines became a core component of an entirely new musical genre: dub music.[89] In truth, permacomputing sees abandoned computing devices and e-waste as many different instruments waiting to be brought back to life, turned upside down and rediscovered to simply create new things. We believe that the end of a computer product's lifecycle should be seen as a moment of celebration, a moment when its socioeconomic context can finally

# Purpose

We are humans and might as well get used to it. So far, remotely done power and glory—as via government, big business, formal education, church—has succeeded to the point where gross profits obscure actual loss. In response to this dilemma and to these losses a realm of intimate, community power is developing—power of communities to conduct their own education, find their own inspiration, shape their own environment, and share their knowledge with others. Practices that aid this process are sought and promoted by the DAMAGED EARTH CATALOG.

- Appropriate Technology
- Benign Computing
- Collapse Informatics
- Computing within Limits
- Convivial Computing
- Degrowth
- Ecofeminist and Always Unfinished Space Making (rED)
- Feminist Technology
- Jenga Computing (rED)
- Liberatory Technology
- Low-Tech
- Patchwork Computing (rED)
- Permacomputing
- Salvage Computing
- Seismography of Artistic Practices (rED)
- Small Technology
- To be continued...

damaged.bleu255.com

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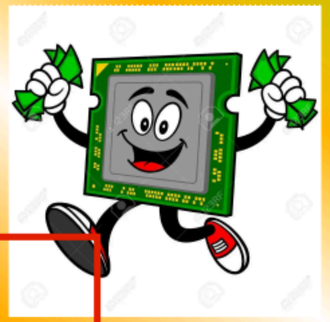
# Varia Afhaal

## Chip Shortage or Chips on Demand



# gardening as

Saturday
24th June 2023
13:00 — 17:00
@
varia
rotterdam

bring your own soil

# electricity making

# ←Plantenna 1.0

February to September 2022 — Design Academy Eindhoven Experimental wild camera and server
TOOL, NETWORK, ENERGY,
474.40KB | Last updated 12 Jan 2023

---

“Can we use the Internet to rethink our relationship with non-human-centered places? Plantenna 1.0 is a proposal to use a webcam and webchat as a respectful, distant & less extractive way to care about nature.”

Plantenna 1.0 is a research instrument that proposes new ways of being in contact with nature by mediating between humans and non-humans. By connecting to a fragile plant-like apparatus through an online web-chat, users are invited to initiate a conversation with the Plantenna and ask questions about the meteorological conditions of its surroundings, while accessing a live video feed streamed directly from the device. Despite being a human-made creation, the Plantenna is subject to many of the same constraints as a real plant: it is powered by the sun, and therefore subject to the conditions of the weather. Plantenna’s goal is to propose a non-hierarchical interaction with nature that is based on curiosity and care, rather than control

The camera streaming live from a low angle, placing the viewer amongst the plants. | 66.60KB

Plantenna is sun powered, and will go offline after several days of cloudy weather. | 94.16KB

# Lowtech Manifesto

"Lowtech" means technology that is cheap or free.

Technology moves on so fast that right now we can recover low-end Pentiums and fast Macintoshes from the trash. Lowtech upgrades every year. But we don't have to pay for it.

Lowtech includes hardware and software. We advocate freeware and low cost software. We particularly advocate the use of low cost, open source operating systems.

High technology doesn't mean high creativity. In fact sometimes the restrictions of a medium lead to the most creative solutions.

Independence is important. Don't lock your creativity into a box you don't control.

Access is important. Don't lock your creativity into a format we can't see.

High tech artworks market new PCs. Even if they aren't meant to. Artworks that make use of new, expensive technology can't avoid being, in part, sales demonstrations. Part of the message of an online video stream, whatever its content, is "Hey, isn't it time for an upgrade?".

Communicators concerned with the meaning and context of what they do may want to avoid this.

We're skeptical about the consumerist frenzy associated with

WE TRIED IN THE 90S
IT DOES NOT WORK

I wake up every day right here, right in Punxsutawney, and
it's always February second and I can't turn it off.

It's now safe to turn off
your computer.