Zine

school of machines
MAKING & MAKE-BELIEVE

Take a break. Breathe. Relax. Stretch. Roll around. Give yourself a hug. Appreciate yourself. Smile. Give yourself a high-five. Another hug. This time a big one. Think 'Oh me/us, thank you for being here, for getting us here to this point, for surviving all the things that weren't easy. And survive we did because, Hey, Here we are!' Feel good. Laugh if it feels appropriate. What are we doing? I don't know just go with it. Keep reading.

We are literally these skin sacks with flowing blood and oxygen and water (lots of water), cells, microbes, things pumping and processing, filtering, things putting other things in their place— you go here, you go there, no wait, not there, here. Our bodies are little miracle workers! All these little things happening inside, without us having to make every single decision. Magical machines are we!

Each part of us is there for a reason. Some of those reasons we know. Lungs to breathe, heart to pump all the things, etc. Some we don't know. Hereditary illness? Ok. But why? Why! Insert group hug here.

Some things in and on our sack are there randomly, through no choice of our own. Some are accidents, scars serving as reminders for experiences past, both pleasant and unpleasant. Some things we put on or in our sacks ourselves because f*ck you/everybody this is my/our body, I/we will have a say!

Our brains are, in a way, the heart of our sack machine. Even our actual hearts can have an
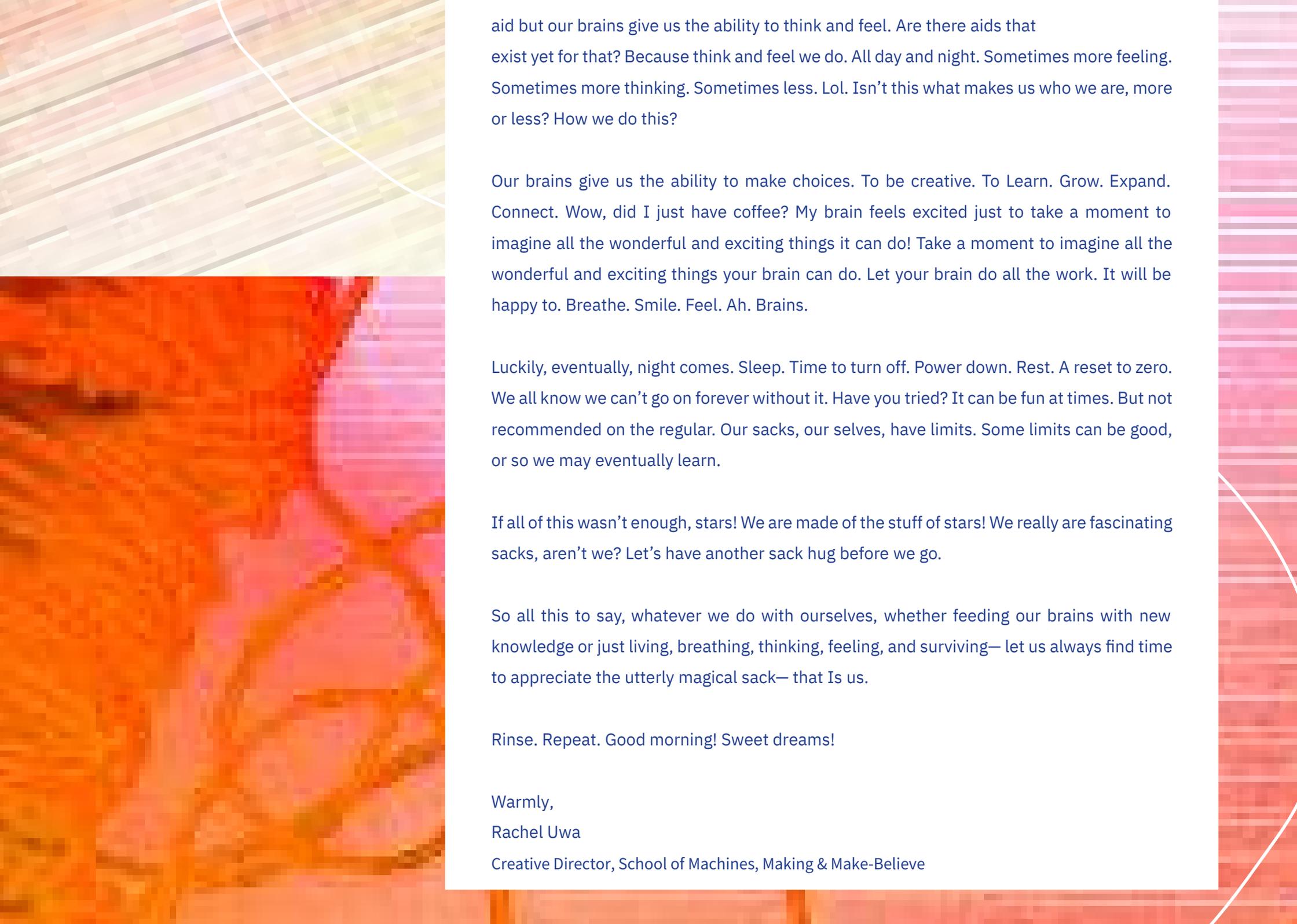
aid but our brains give us the ability to think and feel. Are there aids that exist yet for that? Because think and feel we do. All day and night. Sometimes more feeling. Sometimes more thinking. Sometimes less. Lol. Isn't this what makes us who we are, more or less? How we do this?

Our brains give us the ability to make choices. To be creative. To Learn. Grow. Expand. Connect. Wow, did I just have coffee? My brain feels excited just to take a moment to imagine all the wonderful and exciting things it can do! Take a moment to imagine all the wonderful and exciting things your brain can do. Let your brain do all the work. It will be happy to. Breathe. Smile. Feel. Ah. Brains.

Luckily, eventually, night comes. Sleep. Time to turn off. Power down. Rest. A reset to zero. We all know we can't go on forever without it. Have you tried? It can be fun at times. But not recommended on the regular. Our sacks, our selves, have limits. Some limits can be good, or so we may eventually learn.

If all of this wasn't enough, stars! We are made of the stuff of stars! We really are fascinating sacks, aren't we? Let's have another sack hug before we go.

So all this to say, whatever we do with ourselves, whether feeding our brains with new knowledge or just living, breathing, thinking, feeling, and surviving— let us always find time to appreciate the utterly magical sack— that Is us.

Rinse. Repeat. Good morning! Sweet dreams!

Warmly,
Rachel Uwa
Creative Director, School of Machines, Making & Make-Believe

Contents

Reflexiones a Través de las Máquinas

26. April -24. May

Samuel
Martínez
Andrade

@sammtza___
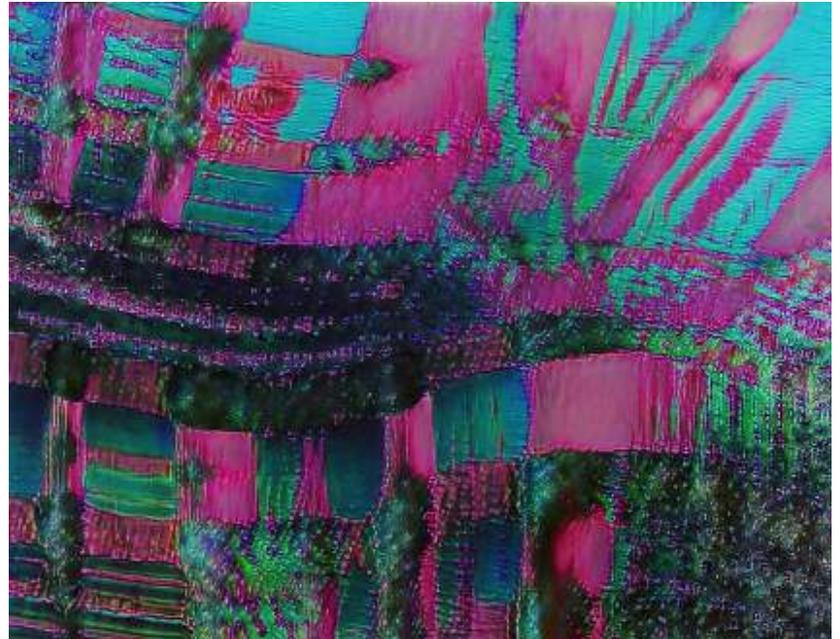
"1) Me sorprende lo accesible que es ahora involucrarse con este tipo de tecnologías;

2) El espacio latente, el cual es elespacio en el que un algoritmo basa la creación de su red neuronal y entrenamiento, trasciende del campo de la programación computacional a un planteamiento muy filosófico. Pienso mucho en la idea de que nosotres mismes estamos inmerses ya en un espacio latente propio, construido por nuestras relaciones, pensamientos, culturas, afectos y acciones (red neuronal), y en ese sentido todo el tiempo somos capaces de recrearnos, mutar, "re-entrenarnos", mediante el cultivo de nuestra mente, energía, cuerpo: un flujo continuo de cambio constante en relación a nosotres, nuestra interioridad, siempre en paralelo con el mundo exterior perpetuamente en movimiento (esto en contraposición a la perspectiva de desconexión, aislamiento o estancamiento entre disciplinas, culturas, identidades, creencias, ideas, etc.);

3) Queda tanto por aprender, ex-perimentar, compartir. Siempre."

"1) I'm amazed at how easy it is now to get involved with all these new technologies.

2) The latent space, which is the space in which algorithms based the creation of their neural web & training, transcends from the computer programming field to a very philosophical approach. I've been thinking a lot about the idea that we are already immersed in our own latent space, built over relationships, thoughts, cultures, affections & accions (neural web), and in that sense we are able to recreate, mutate, & "re-train" ourselves all the time through the cultivation of our mind, energy & body: a continuous flow of constant change in relation with ourselves, our interiority, & always in parallel with the external world perpetually moving (this opposed with the perspective of disconnection, isolation or stagnation between disciplines, cultures, identities, beliefs, ideas, etc.).

3) There is still a lot to learn, to experiment, to share. Always."

Catalina Alarcon
@catalarconr

reflexiones a través de las máquinas
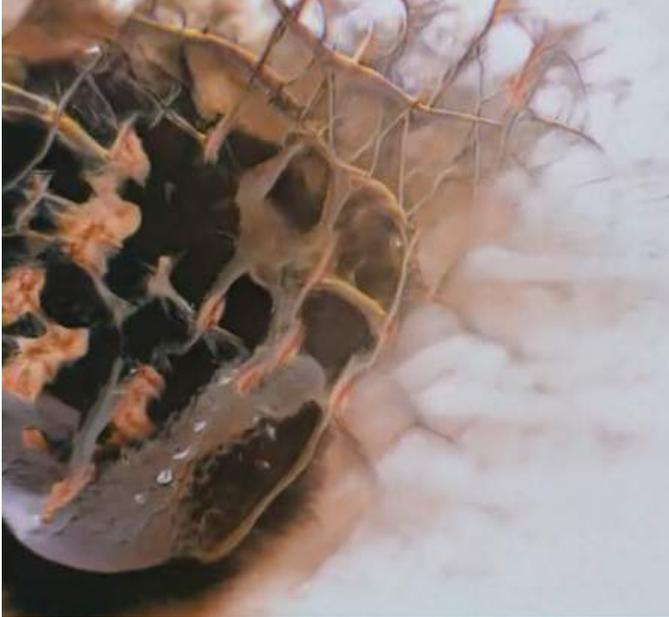
"Espacio latente generado gracias a un Dataset personal de imágenes familiares, objetos y lugares de infancia. Este proceso de interpolación se realizó en Runway gracias al taller Reflexiones a través de máquinas de School of Machines."

"Latent space generated thanks to a personal Dataset of family images, objects and childhood places. This interpolation process was carried out in Runway thanks to the workshop Reflections through machines by School of Machines."

Watch the full video here.
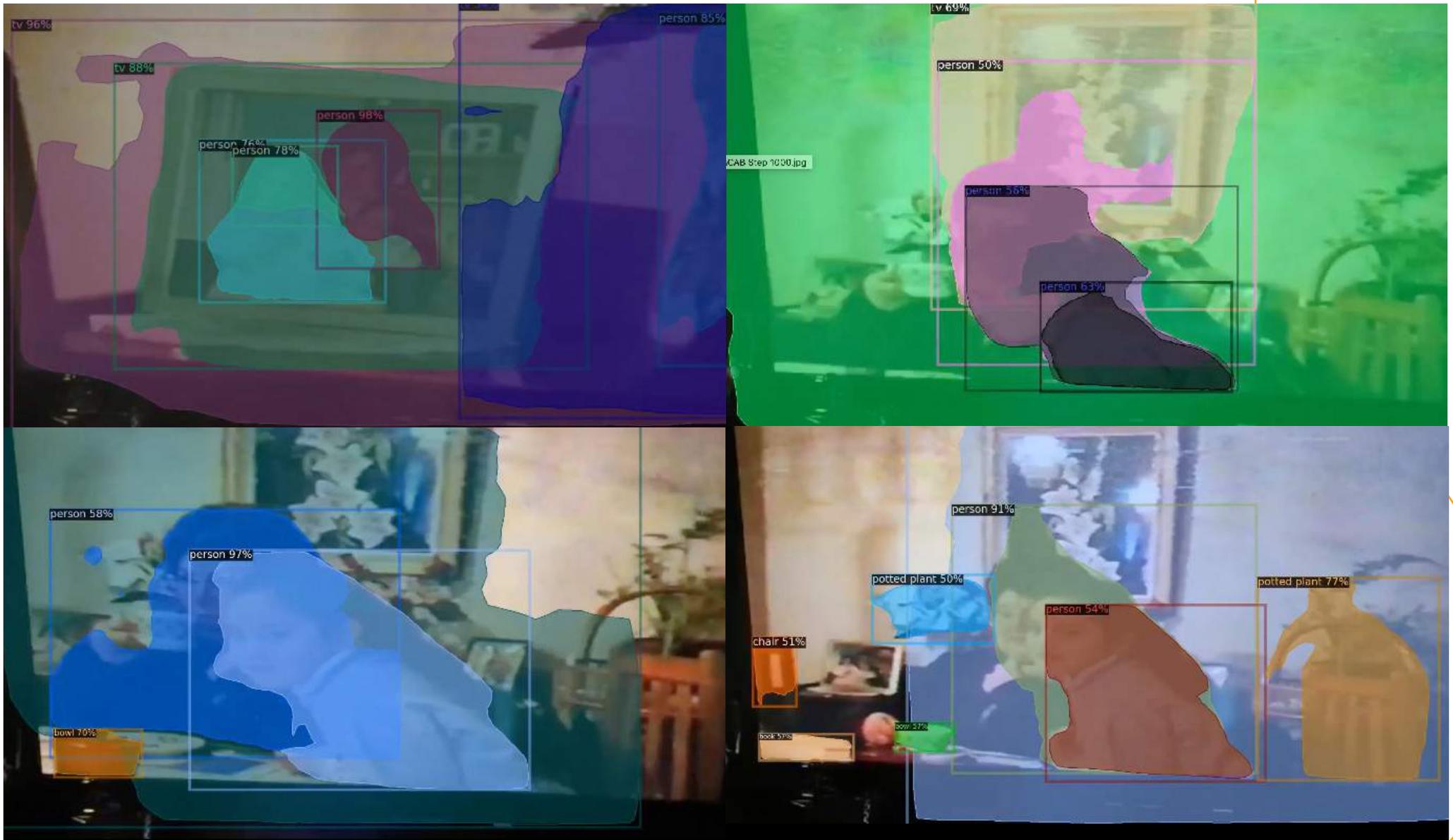
Screenshots taken from video which you can watch here.

reflexiones a través de las máquinas

3000 pasos de la parte de Resistencia

Interview with intructors Moises Sanabria and Fabiola Larios

1.
Acabas de dar tu primera clase con nosotros. ¿Puede hablarnos de ella, de qué trató, cómo fue? ¿Le sorprendió algo?

1.
So you just ran your first class with us! Can you tell us about it, what was it about, how did it go? Did anything surprise you?

F: "Reflexiones Con Maquinas" es nuestro primer curso centrado en la enseñanza de RunwayML para capacitar a los estudiantes a perseguir su interés creativo con el vocabulario y las herramientas de la inteligencia artificial. Tuvimos una gran primera clase en la que todos los estudiantes crearon su propio modelo de aprendizaje automático personalizado.

M: Nos encantó cómo reaccionaron los estudiantes al curso, y sus proyectos finales fueron emocionantes. La participación activa de los estudiantes y sus variados intereses se refirieron a cómo la Inteligencia Artificial se aplica al cine experimental, a las bellas artes y al diseño. Además, impartir nuestro primer curso en español fue una forma estupenda de relacionarnos con los hispanohablantes y debatir cómo afecta la IA a las culturas hispanohablantes.

F: "Reflexiones Con Maquinas" (Reflections with Machines) is our first course focused on teaching RunwayML to empower students to pursue their creative interest with the vocabulary and tools of artificial intelligence. We had a great first class where all students created their own custom machine learning model.

M: We loved how the students reacted to the course, and their final projects were exciting. The active participation from students and their varied interests touched on how AI applies to experimental film, fine art, and design. In addition, teaching our first course in Spanish was a great way to engage with Spanish speakers and discuss how AI affects Spanish-speaking cultures.

2.
La clase no trataba sólo de la tecnología, sino que también pensaba en cómo humanizar la sociedad a través de la inteligencia artificial. Entonces, ¿por qué es importante dar este tipo de clases (también) en español?

2.
The class was not just about technology but also thinking about how to humanize society through artificial intelligence. So why is it important to hold these kinds of classes (also) in Spanish?

F: La mayoría de nuestros estudiantes son de México y viven en un contexto en el que la tecnología es sólo para unos pocos. Permitimos a nuestros estudiantes experimentar el Machine Learning sin aprender a codificar utilizando herramientas visuales y clases intuitivas para aprender a su ritmo.

M: Hacer que los recursos de IA enseñables sean accesibles para las culturas latinoamericanas es esencial. Equipar a los creadores de habla hispana con herramientas de aprendizaje automático permite a los estudiantes expresar su profesión y su herencia a una comunidad de ai que quiere ver sus perspectivas. Además, al crear más oportunidades para los hispanohablantes, la comunidad de creativos de ml se expande a nuevos lugares y se convierte en un tema refrescante para los recién llegados.

F: Most of our students are from Mexico, living in a context where tech is only for a few people. We allowed our students to experience Machine Learning without learning to code using visual tools and intuitive lectures to learn at their own pace.

M: Making teachable AI resources accessible for Latin American cultures is essential. Equipping Spanish-speaking creators with machine learning tools enable students to express their profession and heritage to an AI community that wants to see their perspectives. In addition, by creating more opportunities for Spanish speakers, the creative ml community expands to new places and makes for a refreshing topic to newcomers.

3.

Me he dado cuenta de que algunas personas de su clase han creado NFT en Hic et Nunc. ¿Fue algo que se incluyó en el curso, o cómo surgió?

M: La creación de NFT fue una emocionante idea extracurricular. La acuñación de fichas no fungibles surgió como tema de conversación en un momento en el que la comunidad de NFT está floreciendo. La clase fue un gran recipiente para apoyar a los estudiantes interesados en acuñar su creación de IA.

F: Uno de los estudiantes preguntó sobre nuestra acuñación en diferentes plataformas, y teníamos otro estudiante acuñando activamente, así que iniciamos una conversación después de la clase sobre los NFT. Su plataforma favorita y conocer otras tendencias tecnológicas junto al aprendizaje automático creativo.

3.

I noticed some people from your class creating NFTs on Hic et Nunc. Was that built into the course, or how did that come about?

M: Creating NFT's was an exciting extra-curricular idea. Minting nonfungible-tokens came about as a conversation topic during a time where the NFT community is burgeoning. The class was a great vessel to support students interested in minting their AI creations.

F: One of the students asked about our minting in different platforms, and we had another student actively minting, so we started a conversation after class about NFTs, their favorite platforms and become acquainted with other technological trends alongside creative machine learning.

4.

Es un tema controvertido. ¿Cuáles considera que son los beneficios de este tipo de plataformas para los artistas y la gente de las culturas latinas en particular?

F: Los creativos tienen un nuevo momento para vivir de su arte, donde están más empoderados para fijar sus propios precios y tienen más equidad y comunidad sobre el futuro de las NFT y la adopción cultural de las criptotransacciones. Los artistas subastan su obra sin la representación de las galerías y definen por sí mismos su relación con el mercado de las NFT y los potenciales coleccionistas.

M: Los beneficios de las plataformas de NFT son especulativos, pero merece la pena perseguirlos por su impacto cultural y su misión económica. Los ingresos suplementarios de las NFT, si se gestionan correctamente, pueden beneficiar a las culturas creativas latinas para encontrar nuevos medios de apoyo a su práctica artística.

4.

It's a controversial topic. What do you see are the benefits of these kinds of platforms for artists and people from Latin cultures in particular?

F: Creative people have a new moment to live from their art, where they are more empowered to set their own prices and have more equity and community about the future of NFTs and the cultural adoption of crypto transactions. Artists auction their work without gallery representation and define for themselves their relation to the NFT market and potential collectors.

M: The benefits of NFT platforms are speculative but worth pursuing due to their cultural impact and economic mission. The supplementary income from NFTs if managed correctly can benefit creative Latin cultures to find new means of supporting their artistic practice.

5.
También tenemos previsto impartir esta clase en inglés este otoño. ¿Qué puede esperar la gente?

M: Esperar que el material del curso esté actualizado para aterrizar los aspectos técnicos y críticos del proceso de aprendizaje automático creativo. El curso será una guía práctica para que los principiantes se sumerjan en la inteligencia artificial desde la óptica de las humanidades digitales.

F: Este otoño, ofreceremos más herramientas para crear arte de aprendizaje automático y nuevos modelos para aprender a utilizar sus conjuntos de datos personalizados. Nuestro objetivo es enseñar y ampliar la comprensión de dónde la visión por ordenador y las técnicas de generación de imágenes definen una nueva estética ai.

5.
We are also planning to run this class in English this fall. What can people expect?

M: Expect up-to-date course material to ground the technical and critical aspects of the creative machine learning process. The course will be a hands-on guide for beginners to dive into artificial intelligence from a digital humanities lens.
F: This fall, we will offer more tools to create Machine Learning art and new models to learn how to use your custom datasets. Our goal is to teach and expand the understanding of where computer vision and image generation techniques define a new AI aesthetic.


Artwork by Diego Ortega
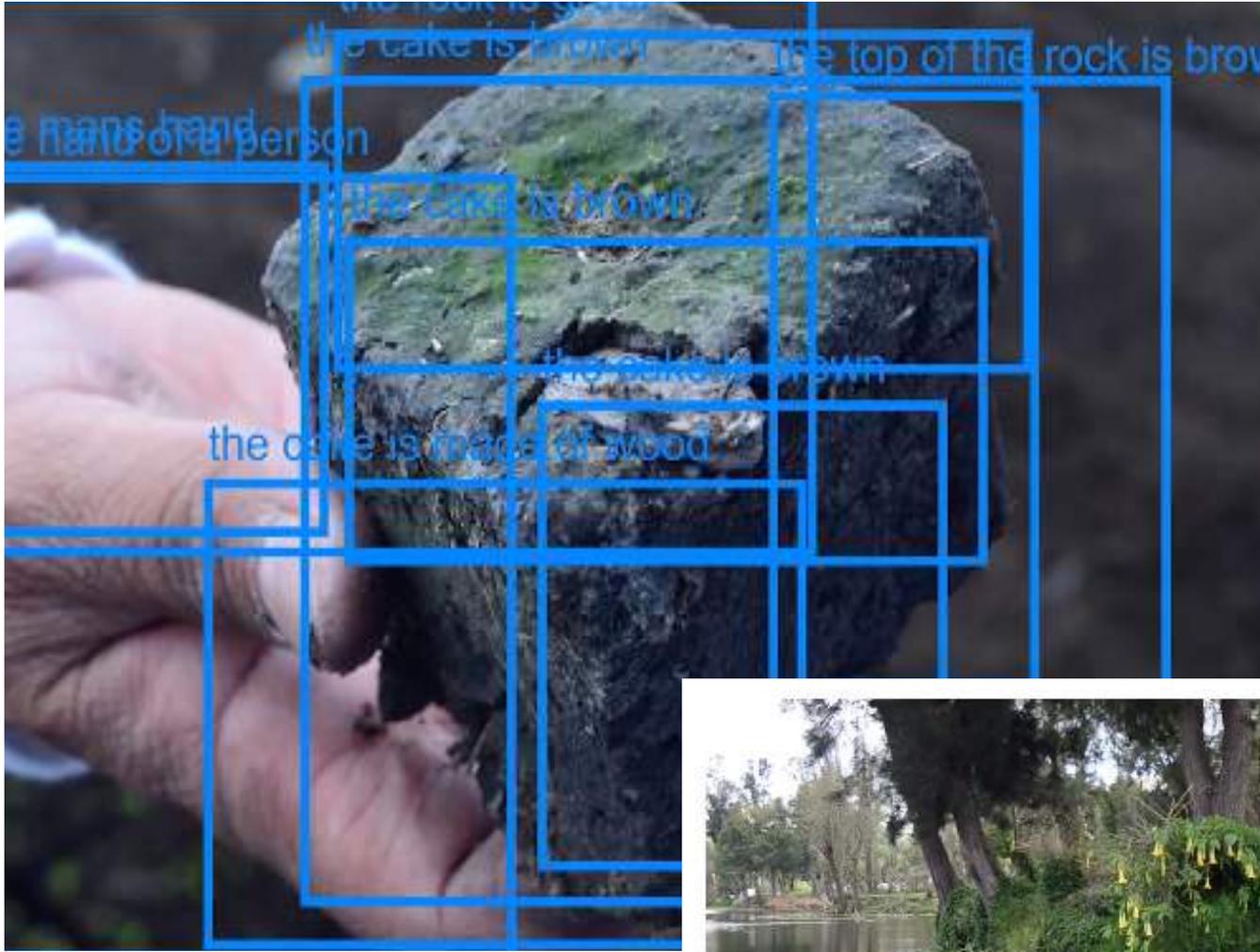
Diego Ortega

@apxcalyps0

Made using densecap, attnGAN, styleGAN, YOLOv3.

Input dataset

sl.renA.

the shirt a white
a hand holding a stick
the man is holding a fork
the grass is
the grass is green
the mans mouth is open
the grass is green
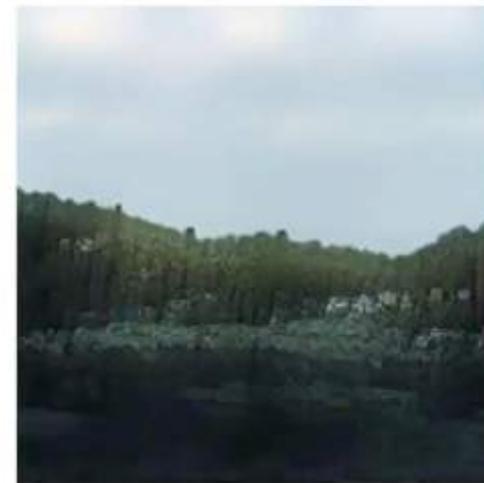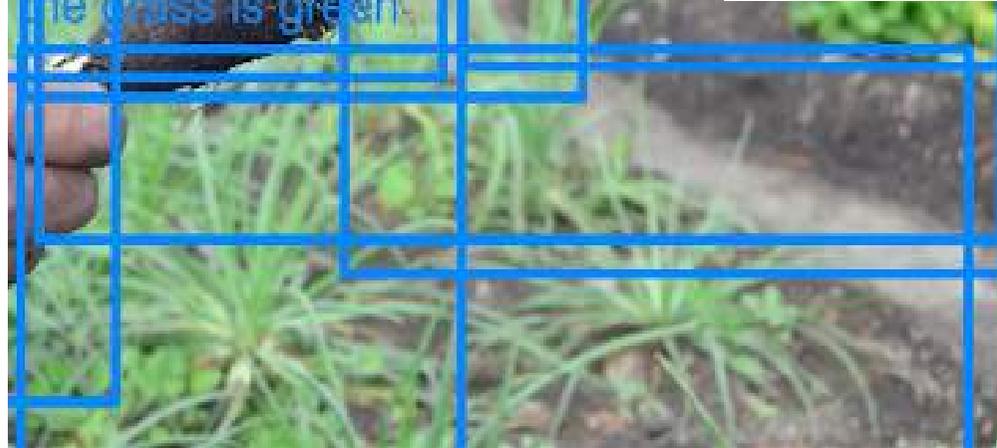
sl.renA.

Click here to watch full video

Algorithmic Poetry

26. April -24. May

Apnoloni

Abapodžu

Čiodyoap

Cažuab

Caleapab

Šeo

Leabćauat

Niyeab

Wačišou

Ableodni

Od

Yešou

Atčauneno

Ležeca
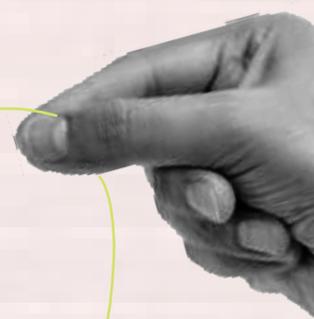
Kit Kuksenok

@xn_ze_ro

Experiments on a generative pidgin.

A handmade fantasy map by > Kit Kuksenok (for D&D) that relied on "Pidgen 1.0" for place (And character) names

> Try it

Polon'

Lev

Cremation Grounds

Zagat'

Ostemar

Osdar

Cremation Wetlands

Zadar

New Lev

Lake Marrow

Ugat' Kramo

Ceste Vrate

Odëigma

Ugat' Drevo

Dorota Grajewska

@dorota.grajewska

This is one of those bleak and dull stories about
an ordinary life of an unremarkable bunny.

I would strongly recommend to leave this site.

Hmm, it seems that you want to know more.
Nah, get me out of here.

Yes, tell me more.

View the interactive online story here

Bunny Bunny looks at a meme.
The emptiness of the bunny existence hits him deeply.
His heart stops.
He wakes up in the black void with a bright light in front of him.
What do you do?

Screw it. I am staying in the black void.

I shall follow this bright light!

Rob Barker

@rrbaker

View the interactive online story [here](#)

v i s u a l
Methodologies
for Climate
Futures

29. April -27. May

JANUARY

2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010

coast buckwheat
eriogonum latifolium

coastal green hairstreak
callophrys viridis

FEBRUARY

2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010

coast buckwheat
eriogonum latifolium

coastal green hairstreak
callophrys viridis

APRIL

2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010

coast buckwheat
eriogonum latifolium

coastal green hairstreak
callophrys viridis

MARCH

2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010

coast buckwheat
eriogonum latifolium

coastal green hairstreak
callophrys viridis

Alexandra Harker

"I scraped data from iNaturalist to look at how seasonal changes for the Coastal Buckwheat changed from month to month from year to year, to see if there were any visible impacts in seasonal shifts due to climate change. I tracked that plant in particular because it is the host plant for the Green Hairstreak butterfly, which is a threatened species. I also tracked photos of the Green Hairstreak from month to month from year to year. I wasn't able to notice any significant shifts in the last decade, but think that it would be interesting to track over a longer timespan."

Edyta Bogucka

edytabogucka.de

"Slavic paganism traditionally refers to the beliefs and rites of Slavic tribes existing in Central Europe before the Christianisation. Currently there is a growing number of initiatives to restore pagan culture in various modern forms, such as wicca, druidry or goddess movement.

What are the visual representations of modern slavic pagans and how do they (not) relate to the main contemporary concerns?

The grid shows images scraped from Instagram. Artifacts, people and nature are clustered based on their visual similarity. The most dominant hues are browns and reds - colors of Earth, wood, fire, blood and traditional fabric patterns."

Click here to read more and view the interactive map.

Dorota Grajewska

@dorota.grajewska

"The images used for the work were scrapped from different Social Media accounts (mainly Pinterest) with the tag of Anthropocene. I used both techniques taught in the class - auto-blending layers in Photoshop and the opacity change to get resulting collages."
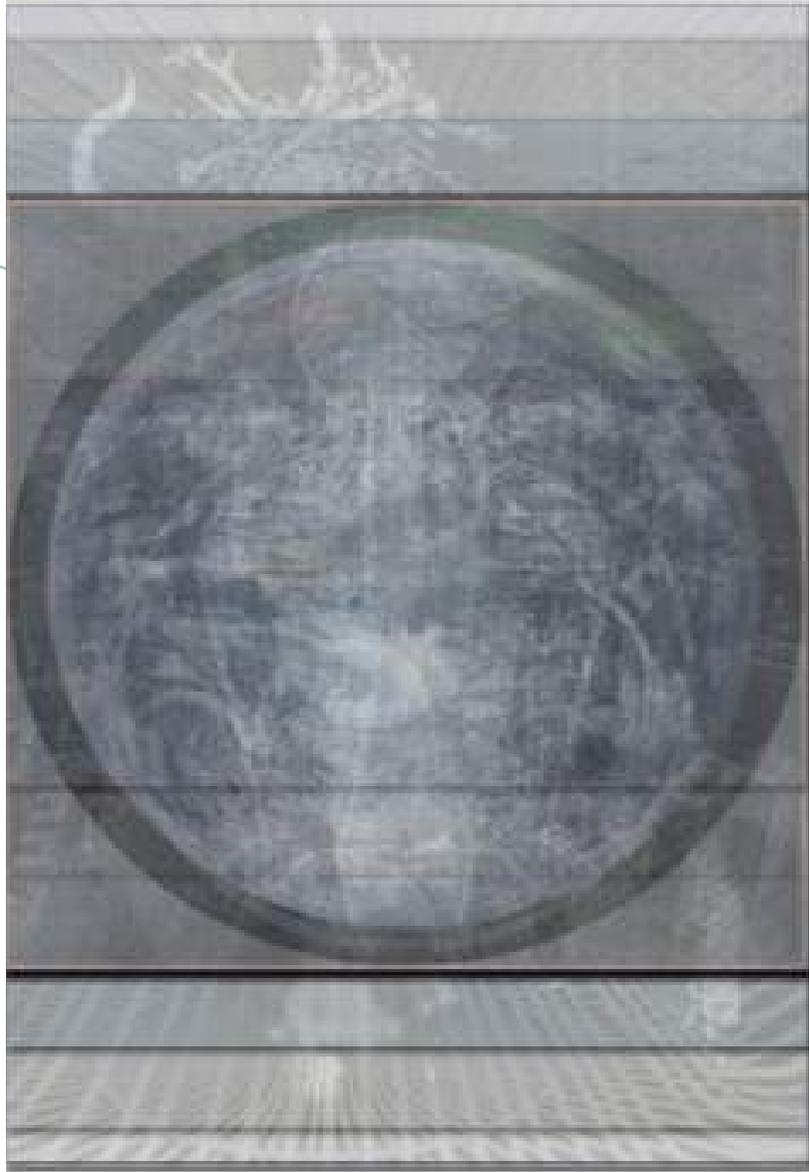
Duncan Geere

@duncan_geere

Solar Punk collages

"I put this collage together as part of the Visual Methodologies for Climate Futures course. It mixes together ten different images scraped from Pinterest that were tagged "solarpunk", and was assembled by misusing Photoshop's powerful Autoblend functionality. I love the weird combination of greenery, architecture, and tiny people looking down from balconies and conducting business meetings that resulted from this process.

Videodrones

7. July. – 11. July

videodrones

27

This June, School of Machines spent a week in the forest areas outside Bratislava, Slovakia with a group of 20 people from the V4 countries (Czech Republic, Hungary, Poland, Slovakia) talking about borders and drones. Inspired by Johnny Harris' Vox Border's series, this class was aimed at getting hands-on with drones and filming drone video footage while connecting concepts of borders, history, politics and the experiences of being human.

During the week-long program we took field trips to the borders of Slovakia-Hungary and -Czech Republic, filming, creating group performances in each location, eating and discussing the varied experiences of life in central/Eastern Europe. For many it was our first experience around a group of humans since the pandemic began in early 2020 and we definitely made the most of it.

The week-long program was funding with the support of Visegrad Funds in collaboration with Sensorium Festival (SK), Ziggurat Project (HU), Zlin Design Week (CZ), and Kutatko (PL).

videodrones

Color and Accessibility

27. April -25 May

May
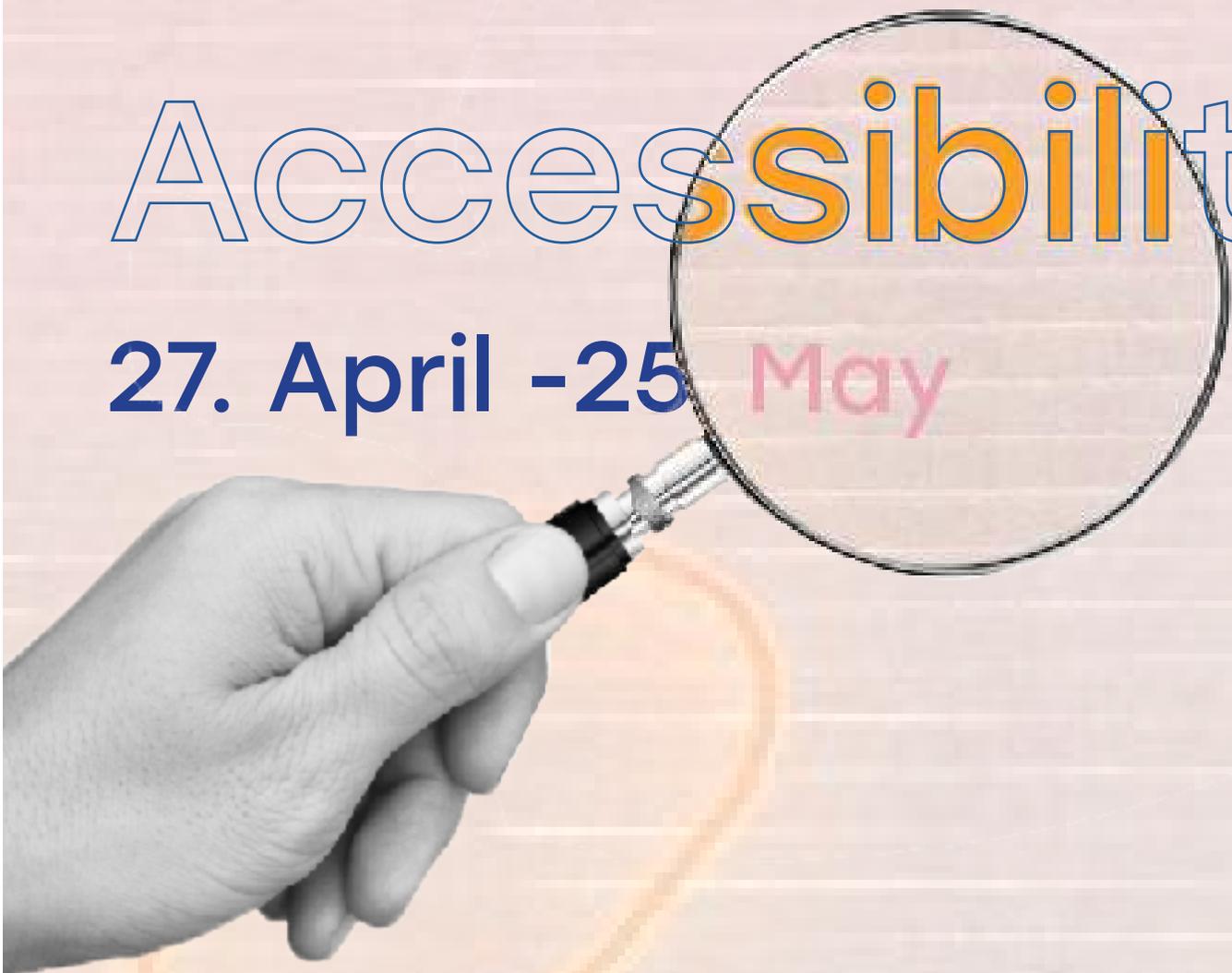
Allison Tanenhaus

@atanenhaus

Color Compositions
from the word:

Woozy
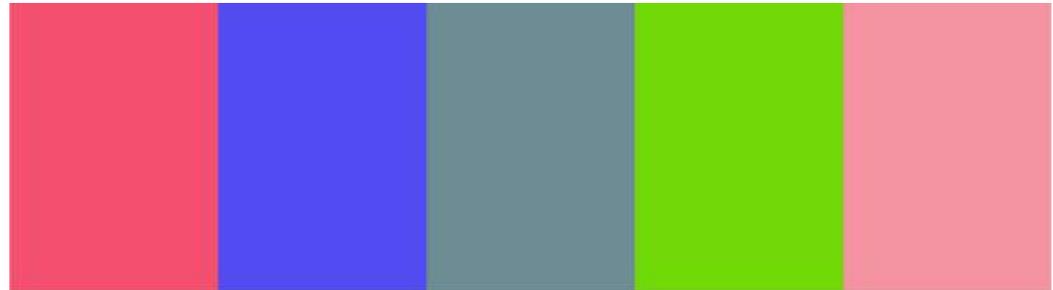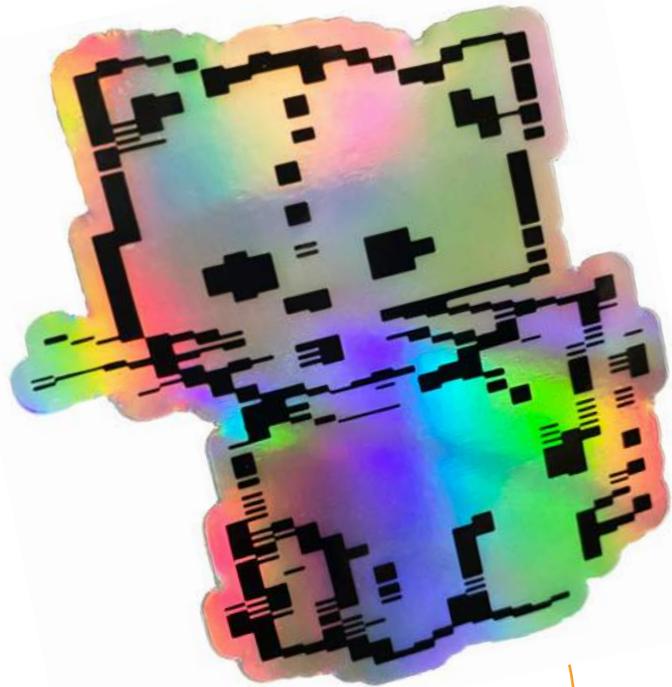
#F2506E	#514BF2	#6C8D94	#70D907	#F393A1
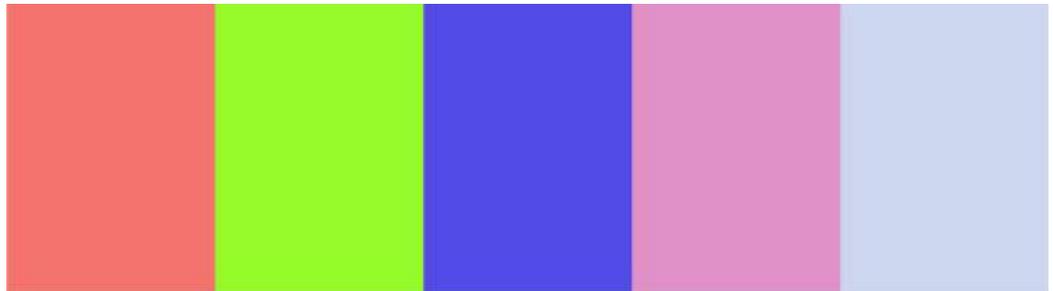
|	
#F5736E	#96FA2A	#534BE6	#B091C8	#CCD6EF

👁 = Color Palette of the LH Image picked by eye

💉 = Color Palette of the LH Image picked using AdobeColor

Camila Vilches

@cbvilches
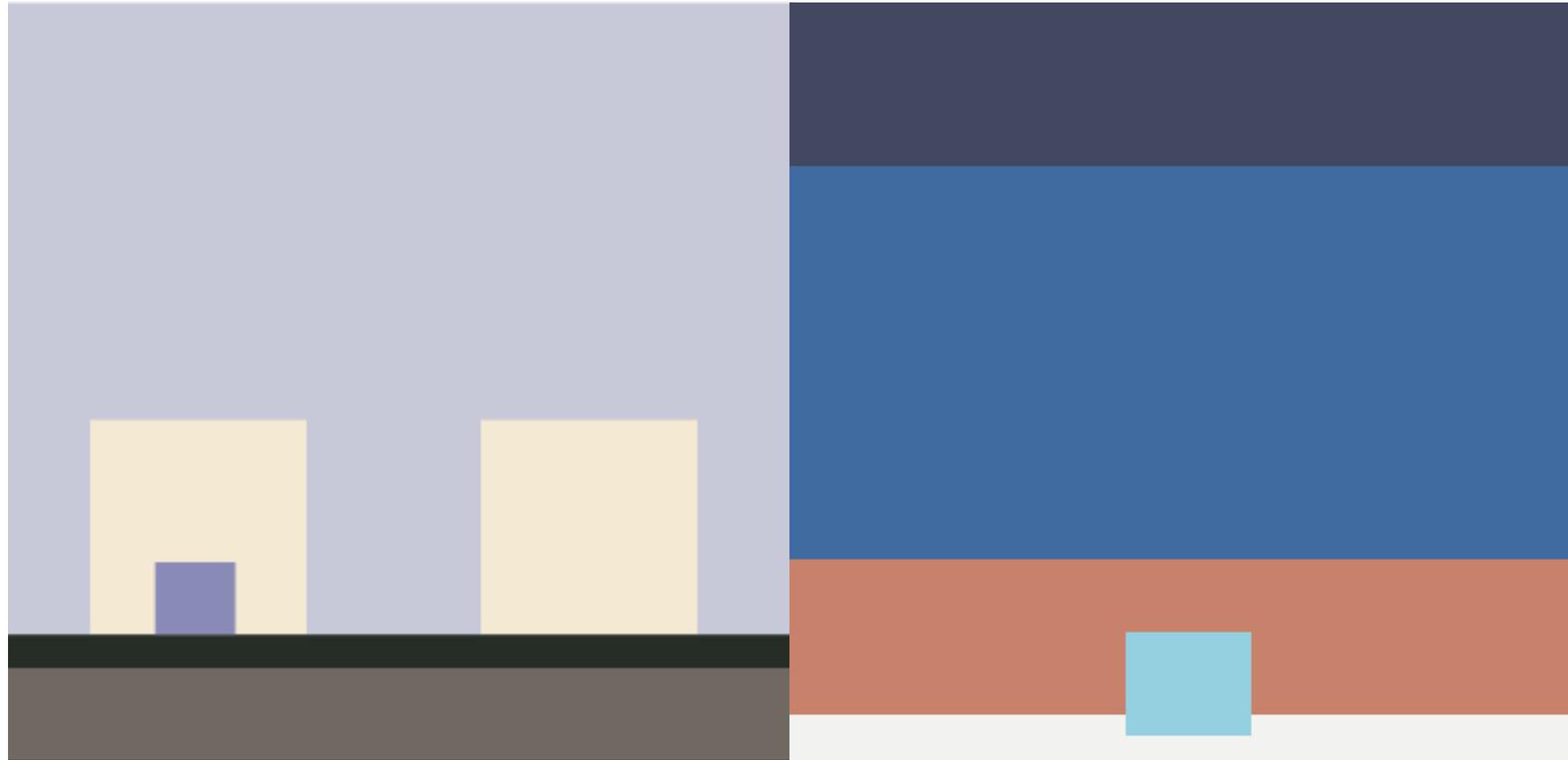
Handpicked Colors

Random picked Colors from AdobeColor

i850   0D5B97   6ACDEA   F2F2EA   CB6651
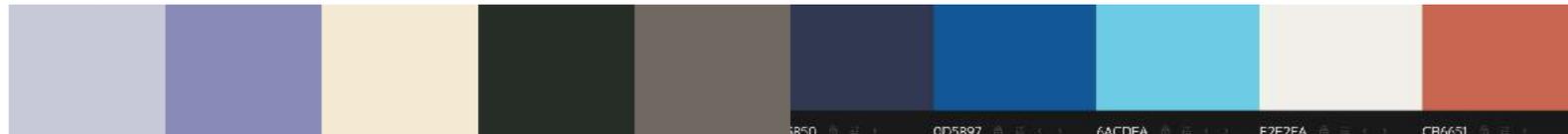
Color Compositions
from the word: **Quiet**

A	B	C	D	E
#3F5925	#B8B566	#597823	#E1BAC3	#6B2424

#D9B8D7	#324001	#667302	#D9D5C5	#591914

A	B	C	D	E

#3A7338	#8CD91A	#F2EBDF	#D95F43	#401D16

35
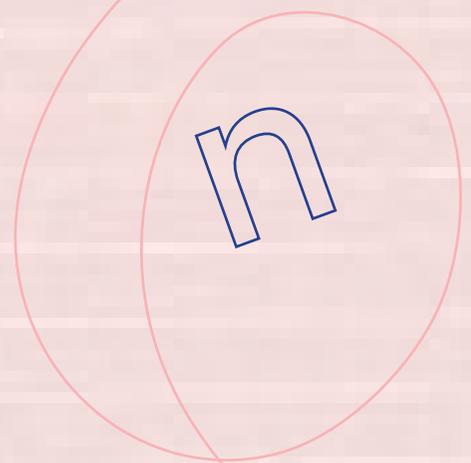
Upcoming

hardware classes

new!

magnetic fields
Exploring electromagnets and coils

coded biophilia
Exploring soft wearables and biological textiles

This autumn for the first time we are hosting two online hardware classes! All the electronics and materials you need will be delievered straight to your door for our 5 week online, hands-on sessions.

Book early!

Dates tbc

soft tissue
Squishy Thinking + States Of
Sensitive Being + Care-full-ness.
15. sept - 14. oct
Every Thursday, 8-10pm CET
click for more info

If we ruled the world II
Visualizing futures in 3D
22. sept - 27. oct
Every Wednesday, 8-10 CET
click for more info
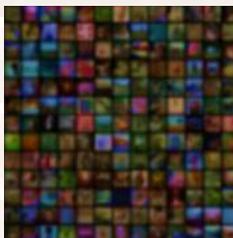
reflections with machines
Implications for future humans
with RunwayML
23. sept - 28. oct
Every Thursday, 8-10 ET
click for more info

the exquisite machine
co-creating speculative artifical
and audiovisual entities
20. sept - 18. oct
Every Monday, 8-10 CET
click for more info

October classes

dates tbc

critical interface design
Critically deconstructing the user interface

negotiated agency
Internet of Things, Voice Interfaces & Machine Learning.

coded biophilia
Exploring soft wearables and biological textiles

gynepunkLAB as medical performativit
Transhackfeminist health tools for self-defense and healing justice

naturaleza tecnológica y entornos interactivos
Explorando el desarrollo de instalaciones interactivas que integren la naturaleza a la era digital.
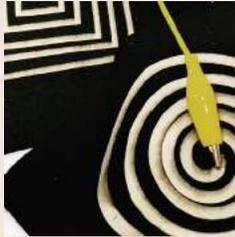
**magnetic fields**
Exploring electromagnets and coils
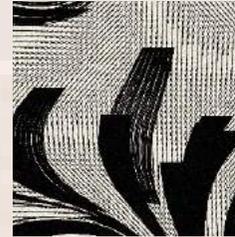
points, lines and systems
 creating generative art with code

data pseudomorphs
Data practices in physical 3D space

aesthethics of interconnectedness
How to collaborate with fellow Earthlings

Something else to look forwards to...
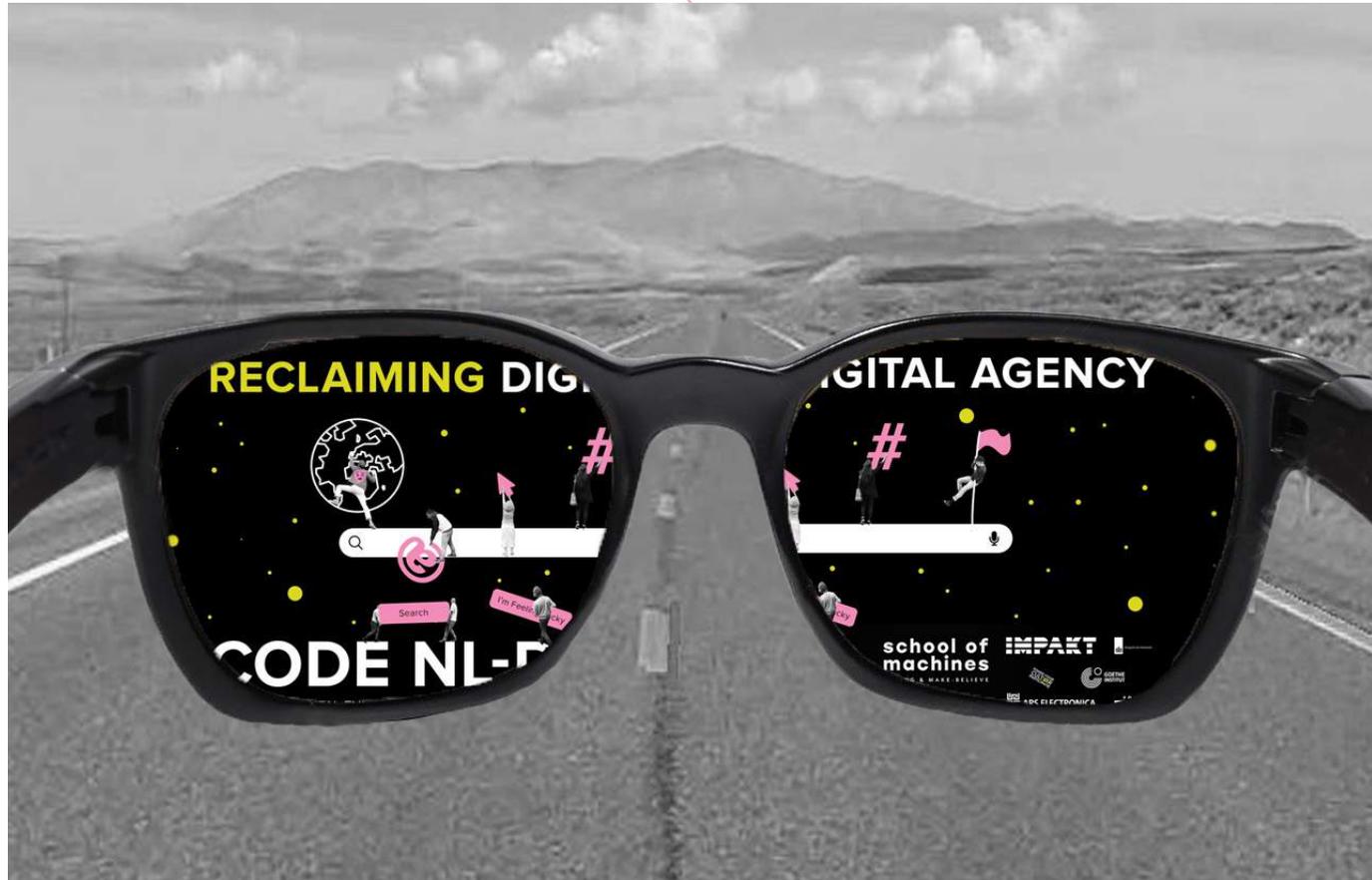
Save the date: Friday 10th September

Keep up to date!

blog

insta

42
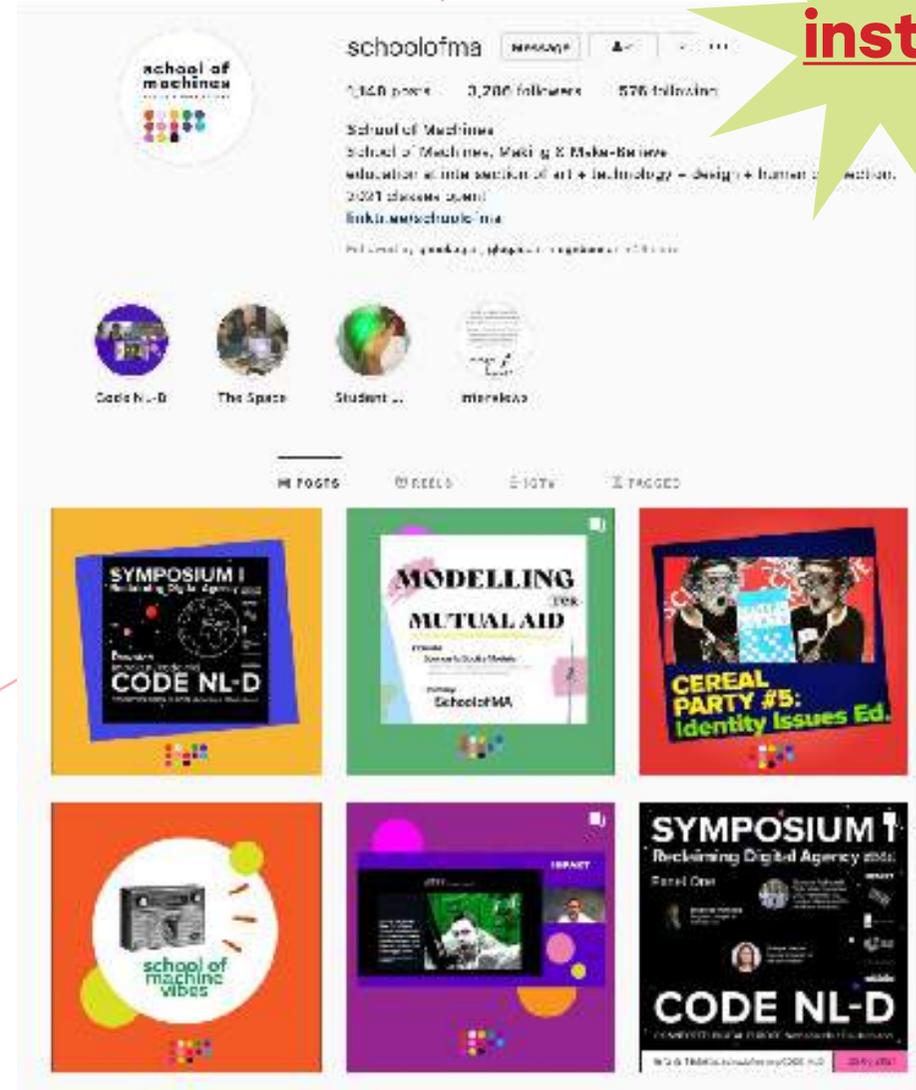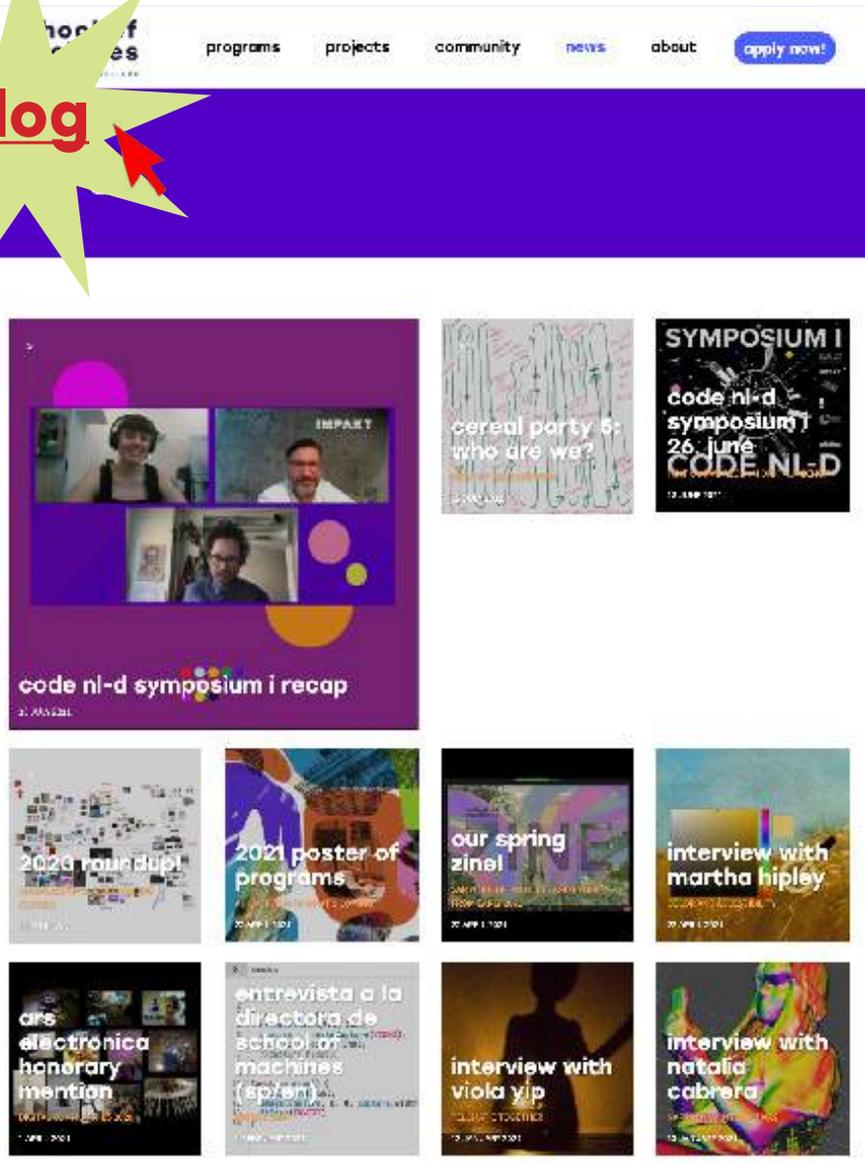
**Thank you for reading.
We hope to see you
soon!**

**hugs and high-fives,
School of MA x**

info@schoolofma.org