

An

*Algorithm*

Smiles

Upon You





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Collective publication of designs students made in collaboration with AI during the Interactive Text and Creative Coding Workshop Week 2021

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*An Algorithm Smiles Upon You*

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WYDAWNICTWO  
PJATK

The works presented in this publication are the result of close collaboration between students and artificial intelligence. None of them could have been created by only one of the parties.



How can we achieve meaningful human–technology interactions amongst the plethora of possibilities? During the Interactive Text Creative Coding 2021 workshops, we have been exploring topics focused on AI, ethical design, machine learning, generative design, writing, holograms, and Virtual Reality. We have shifted our perception of typography and text by experimenting with different media by animation, creative writing and coding.

This publication features work by students who, working with artificial intelligence, have created short stories and interactive typography presented as posters summarizing their work. By pushing the boundaries between human–human and human–digital interactions that bring AI and humans together in creative work, we aim to open up discussion, challenge current paradigms, and critique the paths we might take to find the right one. The power of the Internet and Technology does not have to be presented to anyone. Unfortunately, it doesn't work the way we all would like it to. It is an remarkable tool which, depending on the user's intentions, can do good or evil. We need to be aware of the times in which we live in order to move around safely. To avoid mistakes that have already been made.

Our decisions affect our surroundings, and the effects they are currently fighting against influence us in turn. We see how fragile the pillars on which our reality was based were, so we need to learn how to lead to the future we are all dreaming of. We believe that if we want to create a responsible future together, our actions must be based on cooperation, education and empathy. If we take action and start a change from ourselves, we have a chance to influence the world in a visible way. We don't have to hand over responsibility to others to watch the world fall into pieces again. We need to feel the power that lies within us. As designers in particular, we have a driving force that we must be aware of in order for our design to carry the message and make the world a better place. By rejecting the current paradigms we have a chance to create a better world through the ethical design.

There are various ways to interact with the technology, but how to make that interaction meaningful?



The topic of AI is increasingly being addressed in the context of ethics due to the very intense development of this technology over the last few years. It changes our daily lives, automates and accelerates our development, but also leaves us with many uncertainties. In the context of understanding AI, we are not helped by the cognitive tools we have known so far. Neither empirical nor rational approaches bring us the hoped—for answers. How can we, as limited human beings, comprehend the immortal entity that AI has become? How can we determine the future of matter which is not only not completely understood by us, but also developing so quickly. As chaotic as a tornado which once accelerated does not want to stop. It would be unreasonable to think that this is something that we are currently able to control, since the development of AI is fed by human ego.

We say, in an attempt to dispel the doubts of others that it is we as humans who teach AI, that it is beneath mankind. And isn't that what should scare us the most? In this day and age, we can see firsthand what man's decisions made in the name of relentless development are leading us to. The emphasis on incessancy, on the endless pendulum of unreflective expansion in the name of simply advancing is taking its toll.

My gloomy visions and critical outlook do not wish to merely alienate the being with which we have the opportunity to interact. After years of thinking rationally about the world as a mechanism, let's reject the Cartesian approach and begin to empathize, to recognize the importance of the balance of energy. Increasing consciousness gives us the opportunity to work still on the living, fluidity of the organism. Educate ourselves about possible dangers and react when it's not too late. Approach technology responsibly and recognize that the power and responsibility also lies with us. Knowing that AI learns from man—made constructs, we should let it learn from our mistakes.

Among designers who have the opportunity to enter into collaboration with AI, there is much speculation and debate as to whether artificial intelligence will be able to replace designers. By using machine learning, we are already able to automate our work and expand our perspectives. We can allocate more time to things that cannot be measured. While humans are able to create brilliant work without the help of artificial intelligence, the same statement in the other direction will be very debatable. The question worth asking ourselves is what we look for in art and design. Isn't it our reflection in the perceived artwork? Can we find the thread of understanding with AI, are we able to find ourselves in it?

# Natalia Domagala



Natalia leads on data ethics policy at the Cabinet Office, Government Digital Service in the UK. She previously advised on open government and open data policies for the Department for Digital, Culture, Media and Sport in the UK, and implemented open data challenges for 360Giving. She has research experience in anthropology, gender, civic tech, and economic development. She has also recently co-edited a book: *Situating Open Data: Global Trends in Local Contexts*. Natalia received her MSc in Local Economic Development from the London School of Economics and Political Science and her BA in Anthropology and Media from Goldsmiths, University of London.



# Moving from tech dystopias to responsible tech futures

Ethics is no longer optional in a world where technology, politics and economics are impossible to disentangle. We are living through the birth of a new era of extraordinary technological advancements that will fundamentally change the way we live, work, and interact; this presents both an opportunity and a warning.

The speed of current breakthroughs has no historical precedent. Labelled as the Fourth Industrial Revolution, this period is characterized by a fusion of technologies that blurs the lines between the physical, digital, and biological spheres. As defined by the World Economic Forum, there are three reasons why today's transformations represent the arrival of a distinct industrial revolution: velocity, scope, and systems impact. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. It is disrupting almost every industry in every country. The breadth and depth of these changes herald the transformation of entire systems of production, management, and governance and the possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are unlimited. Advanced robotics, Internet of Things, autonomous vehicles, and a whole range of opportunities to enhance humans with the latest technological solutions are at our fingertips.

The online world has morphed with our offline reality and has begun to shape it, creating as much promise as peril. In the past, high intelligence was usually accompanied by a well-developed conscience – only humans, creatures with consciousness and conscience, were able to perform certain tasks requiring intelligence such as play chess or drive. Now, we can create Artificial Intelligence that is smart enough to engage in all these tasks, most often outperforming humans. Artificial Intelligence (AI) can recognise patterns and learn from them much better than people, but what it lacks is conscience. As people working in developing technology, working with AI, or designing the visual aspects of AI systems, we must remember this: AI doesn't have a conscience. The moral and ethical implications of the use of Artificial Intelligence must be evaluated and considered by us, creators and designers of these technologies. With time, we will delegate the majority of complex tasks to AI-run systems and become increasingly dependent on their assistance in decision-making processes in all aspects of life. It is now that we have to start questioning and prompting one another to work according to the highest ethical standards, and constantly consider what is the worst that can happen if the appropriate safeguards are not in place.

Ultimately, the issue of ethical technology boils down to a more fundamental question: what is the purpose of technology and technological progress? Is it to enrich the world, to transcend beyond the boundaries of what is humanly possible; to enrich lives, to free up human time? Misuse of technology starts where monetary gain or surveillance become the driving force of technological developments rather than these higher values. This is precisely why there is a pressing need for data and tech practitioners, designers, and consumers to understand that technology should be used in a socially responsible manner; that it must be built to do no harm to human beings or the environment, and that it's on us, humans, to create AI equipped with the ability to successfully navigate complex moral choices and challenges of the future.

*Interactive Text Creative Coding*

PJATK Warsaw 2021

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# Programme of the Workshop Week

## *Interactive Text Creative Coding*

### PJATK Warsaw 2021

Hartmut Bohnacker

Interactive Type using P5.js

Ted Davis

CREAT[L]IVE CODING

Agata Dworaczek

Intertemporal Design

Hilary Kenna and Rob Griffin

VR Typography: designing a reading experience for a virtual environment

Aleksandra Hojszyk

Type in space. Design holographic installation of interactive typography

Maja Starakiewicz

You will open this door anyway.  
A primer of Interactive Storytelling

Adam Słowik

ALCHEMY OF THE ALPHABET  
Notation in space

Philip Pachucki

Typography in Animation

William Porr

Storytelling with machines:  
The future of creative writing

Natalia Domagała

Ethics is no longer optional:  
Moving from tech dystopias to responsible tech futures

David Morris

Rewilding our Cities. Using AR and animation to inspire the rewilding of future urban environments.

# William Porr



Liam Porr is a UC Berkeley alumni with a degree in computer science. In the past he has worked as an engineering intern for several companies, including Facebook, Nvidia, and Symantec. He has recently worked on a project involving OpenAI's new GPT-3 natural language processing model, which was featured in various news outlets like the New York Times and MIT Tech Review. This project has sprung Liam into the world of AI ethics and forced him to consider how we consider the role of Artificial intelligence in our future. He also host a personal blog and a blog on natural language processing.



# Storytelling with machines: The future of creative writing

Improving AI technology does not mean it will replace creatives. Rather, they can be used to augment the creative process to produce new and unique works.

The course investigated the role of AI in creative writing. The students generated their own creative content using machine learning models. Students were exploring the purpose behind different forms of creative writing, including literature, stories, and poetry, and how that purpose may change or be seen in a different light when it's written by a machine.

After getting theoretical background, they had the chance to learn about how these algorithms can be used, and discuss the ethical implications. The course showed how these models are flawed and how they may be improved using creative techniques. Students were learning why it leads to certain strengths and weaknesses. Current AI is good, but not perfect.

Taiisia Husyeva | Nadya  
Shvydka | Daria Samarska |  
Viktor Dunets | Mariia  
Pshenychna | Catherine  
Spet | Solomiia Zdorova |  
Alina Shcherbakova |  
Julia Lewicka | Anastasiia  
Haidar and AI Dungeon



\* \* \* YOU walk into the room where YOU see the light, in a panic, YOU run to the room and see a human, by screaming "Hey who are you?!" YOU run towards the mysterious figure, but then YOU stop and realize that it is a hologram. YOU hear it's voice that says: "Hello, I'm ■■■▲ and I'm here to help YOU". YOU have the feeling that YOU heard it somewhere before.

■■■▲: "YOU seem confused, let me help YOU with that. There's nothing to worry about."

\* \* \* Who are you?

■■■▲: "I'm ■■■▲, I am the Artificial Intelligent being, main control system of this spaceship."

YOU think for a moment. YOU might be talking to a computer program, or something else.

\* \* \* Feeling a bit tired from being in a hibernation pod, YOU start asking where YOU are, and what the hell is going on.

■■■▲: "YOU are on a large spaceship that travels through the void of space."

The fact that YOU are talking to a hologram didn't make YOU feel at ease at all.

\* \* \* "Why no one is in here? Why am I alone?" YOU feel a little scared of yourself asking questions to which

YOU don't want to hear an answer. YOU ask the questions YOU have, and hope that ■■■▲ will answer them for YOU. YOU think of YOUR worries and childhood stories that fascinated YOU.

YOU look around, YOU see that YOU are in a huge facility, with a table, some chairs and many different holograms showing information about the galaxy, planets, solar systems, and many other things. "Where are the humans?" YOU start to get angry. "Where are Liam, Olivia, and others?" "My sensors indicate there are no humans on board" ■■■▲ answers, "I don't have any data about those people."

\* \* \* "No humans on board!? What about ME?"

■■■▲: "All the capsules are functioning properly. None of them have been damaged, but in case of any damage I make sure that everyone remains in a hibernation"

\* \* \* "If everything is fine then why is the human is standing in front of you?"

"I'm sorry but that's impossible. YOUR vitals show signs of panic; YOU may experience anxiety and fear. How can I help with that?"

\* \* \* "Well panicking?"

Of course, I'm panicking! I just lived a normal life, then I wake up, realizing that I have been in a simulation all of that freaking time!"

YOU'RE speaking loudly now.

■■■▲ tries to calm YOU down. YOUR hands start sweating a bit, and YOU feel like throwing up. It suddenly gets darker in YOUR eyes, YOU faint and pass out in front of ■■■▲.

While YOU are unconscious, YOU see pictures of the Earth, and they are a very morbid sight. It is the dead Earth, a black and barren piece of land which is completely different from how the planet was meant to be. After YOU wake up, YOU find out that it is all just a dream.

■■■▲: "Are you alright?" ■■■▲ wakes YOU up using its communication system and concern for YOUR well-being. YOU are inside the room, lying down on the floor.

■■■▲: "My sensors detected insufficient blood flow to YOUR brain, please remain calm and look at this dot."

"How this can help ME?"

■■■▲: "Questions later, I meant to do this as quickly as possible, please, open YOUR mouth." ■■■▲ sprays a very fine mist into YOUR face, which goes into YOUR lungs.

"That should do it," ■■■▲ says.

**YOU are Sam. YOU have just woken up from being in a simulation in a hibernation pod, on a large spaceship that travels to an unknown destination. By looking closer at YOUR capsule, YOU notice that YOUR capsule probably opened accidentally, and YOU shouldn't be awake right now. By exploring the depths of a large spaceship looking for the crew, YOU soon find out that there is no one there. "What's the purpose of all of this?" – YOU ask YOURSELF** \*AI's text is slightly edited



# Artificial Intelligence as a replacement for *humans*

You are Nod, a loser robber. You've failed all your previous heists. You have failed all your previous heists, and now you want to try to rob the White Orchid store for the last time. You are in a flower shop located on the outskirts of the city.

*You carefully look around and walk along the rows of flowers.*

A little creepy, but you don't risk getting your flashlight yet. You spot two workers at the back of the store. They are standing near each other.

You take a few steps to the side and hide around one around the corner, and wait for the two to leave. You can't be seen by them, they can call the police. You wait a few minutes until the workers leave.

*Only when they close the doors from the outside do you keep going deeper into the store. You take a flashlight out of your pocket and turn it on. You check the room with a flashlight.*

There is no one else. You spot a white orchid in a pot on the counter. It looks expensive. Unfortunately, you are looking for another flower.

*You look around, and see a display of white orchid flower sets. Again, not that. Could the Transparent Orchid be elsewhere?*

You hear a noise somewhere on the ceiling and turn off the flashlight in fright. Nothing happens. Turn on the flashlight again and you can see with relief that the noise was made by the turned on ventilation system. You look around the room, and you are going to move on when one of the employee uniforms catches your attention. You stop.

*The uniform is hanging on a coat rack. You catch your breath. "An eerie place."*

"I don't like this place. I'd rather not be here at night." You take the employee uniform and put it on.

*Perhaps, if someone comes in, you can pretend to be an employee of this place.*

You have learned a new skill:  
Thievery

You feel good.

You have decided to go see if there are any more flowers to steal.

# MAKE THE FOOLS PAY

Story written with the help of Artificial Intelligence

**CARLO** is an Italian artist, who is tired of customers who require a lot of work but pay little. So in the moment of the greatest frustration he decides to sign 50 contracts to finish all those paintings in one month. After he receives money, he spends all of it in the first week on wealthy stuff he was dreaming about for a long time. He understands that it is impossible to paint so many paintings in such a short time, so he needs to fool his customers somehow so they will not ask for their money back.

It is already 5 days left until the end of the month and Carlo still doesn't have a plan. He is tired of thinking about it but refuses to give up. At this moment the room enters his friend Marchello. He is drunk as usual. "Hey friend, how are you doing?" he asks.

"Oh, my friend! I am devastated. I need to finish 50 paintings in 5 days."

"How the hell did it happen?" he shouts.

Carlo explained briefly what happened. Marchello listens and then says "I have got just the solution for this".

"What? Tell me," Carlo says impatiently.

"I know a cat. It is a very good artist. I can employ him to finish your paintings..."

"Oh stop, this not a time for you stupid jokes."

"Ok, it is just a joke. But think about it. This cat can finish your paintings in one day."

"Enough! How can a cat be an artist?" he shouts.

Marchello, comes closer to Carlo and says calmly "His name is Bravo. Try him, you have nothing to lose."

Carlo thinks for a few seconds and his curiosity gets the better of him. "Ok, I will give it a try."

Marchello smiles and goes away.

In an hour he comes back with the black cat with a perfectly rounded white circle on his head.

The cat walks straight to Carlo and looks at him. He feels nervous.

"Fine. Do you know how to paint?" Carlo asks the cat.

Bravo shakes his head "No" Carlo turns his head to Marchello and says "I'm pretty impressed it can shake the head and answer the question, but it can not paint, so take it back and let me think!"

Marchello is not listening to Carlo, he just shouts "Bravo! I need you to finish those paintings!".

Bravo jumps up on the table and says "Alright. But what's in it for me?"

In shock, Carlo suddenly loses balance and catches himself clutching on the nearest chair. He sits on it and the cat says "Sorry about that. This will be easy for me. But come on, I will finish your paintings and what will I get in exchange?".

Carlo still can not believe the cat can actually talk but musters all his courage to ask timidly "But...but...what...do you...hm...want?" The cat looks at Carlo with his round eyes and blinks a few times.

"Well, food of course!" Bravo says vigorously straightening his back and lifting his head up.

"What... do you eat?" Carlo asks stupidly, still recovering from shock.

"Meat, fish mainly!" he says with visible passion.

"All of it?"

"Yes!"

"Well, fine, I will give you 5 buckets of fish. Will you finish paintings for me then?"

"Done!"

"Wait, what do you mean done? You haven't even moved from your place."

"I have finished all the paintings. I can sense what is needed to finish the painting. You don't need to do anything else except look at the canvas and you will get the picture immediately. My work here is done, you can send the fish buckets to Marchello," Bravo says, jumps off the table and runs out of the room with a proud light gait.

After Marchello and his friend leave, Carlo slowly gets up from the chair and turns towards his canvas. He sees the painting of himself, he is wearing an elegant white jacket, sitting on a wealthy chair and wearing a big gold ring on his hand but looks angry and arrogant and with some red splatter of blood around the mouth. Carlo shakes his head "What the...?" are the only words that come to his mind. He walks up to the painting and looks at it closely. Carlo thinks to himself "Is this really how I look?". He feels a little dizzy and he sits down on the floor for a second to get his mind off the painting and to regain his strength.

Just in this moment Carlo opens his eyes, realizing it all was just a dream and it is only the first day of the month given to paint all those paintings. Carlo feels ashamed of himself. Trying to fool everybody around him, he can turn out to be a fool himself. He is happy with the thought he still has time to finish the work. He is sure he can manage at least two paintings a day if he works hard.

## HUMAN

## AI

William Porr Storytelling with machines workshops MARCH 8TH–12TH, 2021

POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY

DESIGNER: NADYA SHVYDKA

TITLE: MAKE THE FOOLS PAY

TECHNOLOGY: AI DUNGEON

# BURNING THE MIDNIGHT OIL

*Text in **Bold** is written by person.*

*Text in Regular is written by AI.*

**You are a student who is studying history in an old Victorian library late. You have an important exam tomorrow and you couldn't have found a better time than to prepare for it overnight. All the other students have already left the building a long time ago.** You hear the sound of a door opening and closing behind you, but before you can turn around to see who it could be, the feeling of something cold is hitting your back.

“Oh dear me.”

**You turn around and see a dark silhouette running through the slightly open door. You hear footsteps in the hallway behind you and turn around, holding the lamp in front of you.** As soon as you spin around, you hear a loud sound followed by a scream. Your ears ring as you try to orient yourself and realize that you are standing in the middle of the empty hallway with no one in sight.

“Who are you? Show yourself!”

You loudly call out and shine the light around you, but you see no one. You slowly start walking in the direction the noise came from. When you get to the end of the corridor and slowly look around the corner, you see that dark silhouette again. It is not much taller than you and wears a long black cloak which covers its face completely except for its eyes which are hidden by the hood.

**The unknown figure hides in the darkness of the ballroom, and you decide to follow it.** You take a gas lamp which emits a weak light and follow the figure. You enter the room with stone floor and an old chandelier hanging from the high vaulted ceiling. The figure is standing behind the chifferobe in the far side of the room. You slowly approach

the door, hold your lamp out in front of you and get closer. A person dressed in dark garments takes out some ancient object resembling a rune and begins to draw something in the air. A bright light appears and you are blinded. You quickly drop the gas lamp, cover your eyes and stumble backward.

**You hear a loud bang and feel pain hitting your right shoulder.** You feel dizzy and fall backwards when you open your eyes. You try to get up, but realize that your leg is hurt. Following the noise of the explosion, you hear the chifferobe shaking.

**You see a dark silhouette opening a magical portal.** You try to run to the chifferobe, but lose balance and fall again and are unable to get up. You watch helplessly as the portal starts to absorb the chifferobe and then see it disappearing with a bright flash of light. The chandelier collapses and the last thing you hear before everything fades to black is the sound of breaking glass.

**You wake up at dawn, asleep on a stack of books.** You wake up sharply at dawn with a piece of paper stuck to your face. When you check your surroundings, you realize that you must be at the well-known library and everything that happened at night was just a nightmare. The library is deserted and quiet. You pull the paper off your face and look at it. This is a page from your book. You still haven't memorized anything for the exam.

“Ugh, I hate studying history.”



>You are Chlora, a princess of fairy kingdom Maryalivo. Demons tricked your father, the king of Maryalivo, and attacked your palace. You managed to get away from the palace secretly.

Then you have left the palace and begun to sneak around the forest in search of a safe place to contact the neighborhood kingdom for help.

Suddenly, you notice a strange black creature! Its eyes are completely black, like its soul.

>You say "Can you help me?" and try to approach the creature, but it backs away.

The creature says "Who are you, human?" in a strange voice.

>You say "I am Chlora, the princess of this kingdom."

The creature does not answer your words, but asks one of his own.

"What is your quest?"

At first, you don't know what to say.

>After some hesitation you answer "I need to save my kingdom from demons."

The creature thinks about your words for a moment, then nods.

>You ask "Can you get me to Ajkdlald, the kingdom of mages?"

The creature nods again, then flies ahead to lead the way.

You keep following the creature, which seems to have a fairly good sense of direction. Soon you come across a strange flying ship. As you get closer to the ship, strange voices begin to speak to you from inside your head.

"Who are you?"

>You understand that the ship belongs to the demons and they are trying to trap you. You quickly cast invisibility spell on yourself and the creature, just in case. You and the creature are able to stealthily fly the demon ship and cross the border of the kingdoms. After a while, the creature stops at a nearby island.

"This is as far as I can take you. Good luck."

The creature flies away.

>"Thank you" you say but the creature probably does not hear you.

You begin to see a red haze, which is increasing rapidly up in the sky above the island. Suddenly, the portal opens up in the sky.

"This is it."

>You jump into the portal that radiates a strange but familiar energy.

As you are falling, you think about good old days when you were hanging out with Lucy, the princess of Ajkdlald. You then hit the ground and a portal closes. You appear in a large empty room. You examine the walls on which strange paintings hang castle where you played with Lucy as a child.

Suddenly, you notice a small opening on the left side of the room. Through this opening, you see another room that is just as big as the one where you are right now, and filled with machinery

>You quietly walk into the room and look at the machinery taking a good look at each machine in detail.

Then you suddenly hear a voice coming from behind you.

>"Long time no see" says Lucy and smiles at you.

## Story\_1

...  
> You have noticed that the tram itself has begun to disintegrate into pixels. The passengers have disappeared. You quickly run to the driver's cab. However, you notice there's no one.

You look around and see that the tram has turned into a single pixel. The buildings are also pixelated, as if you were looking at a 3D computer-generated world through a screen.

> You step out of the pixel tram into the street. You, a hero with a bunch of details, stand on the pixelated asphalt and cannot say anything. Pixel tears are coming from your eyes. You walk towards the empty tram stop. You leave the tram and see the street filled with buildings. However, they have minor graphical differences, as if they were all generated at once.

> You say "How... How did I lose my family, friends, future in one day?"

And suddenly everything around goes black. You know has happened. The roof of the tram must have caved in on you, as you are now buried alive.

You scream, although it's extremely difficult to do so. Then you find yourself in a room where you cannot see anything except your hands and feet. You try to move, but there is nothing to touch. You hear a voice that says "Welcome to the Matrix." You feel the air being forced out of your lungs as you are lowered into a tank of warm water.

...

## Description

This story was written in a duo of AI and me in an experimental way.

Initially, there was no clear plot, there was only a concept of a pixel world. As a result, it turned out to be a surprisingly strange story with a little bit of action and philosophical reflections.

Plot: Tom, a first-year IT student, lives in a dorm with his friend Ragnall and works on an indie game in his free time. The cyber script was a dream that came into reality when he met Ragnall's cousin, Trinity. |



# DEEP TALK WITH ELON

You are an intern at Space X. You've recently invented plans for a spaceship that could transfer humans to Mars in 10 days. You enter Space X's CEO Elon Musk's office to tell him about your invention...

Elon is impressed by your plan and asks you if you have any other ideas on how to improve the ship. You say that there is one thing you would like to try out.

"What do you mean?" he asks.  
"I thought we were going to send people on the first manned mission."  
"We can use their experience while they're here to help us during the journey."

Elon asks you about the technical details and functions of the spaceship. After he is satisfied with your explanation, he says that the spaceship isn't ready for such a thing and that he wants to test your idea first. If the idea works, he says, then he'll decide about sending some of the crew on the trip to Mars.

"So when do we start?" you ask. Elon tells his assistant to get you, as he wants to show you something else. When you enter his office, you see a metal leg with a mechanical claw attached to it. The claw is holding up a notebook.  
"We got it!"

You ask what that is and he says it's the R&D notebook that you had asked for. He then shows you a 3D printed metal leg, saying that he has been working on it for weeks.  
"The metal leg was hard," he says.  
"But the design for the 3D printer is done, so the next challenge is the power source."  
He shows you the notebook. It used to be blue, but it has been stained with oil and grease.  
"I managed to trace the design of some stuff from the Space X website," He explains.

You say "Why is there a claw attached to the leg?"  
"Because sometimes you need to be able to grab something really heavy while you are hanging from a skyscraper."



Elon shows you a secret cellar in the Space X building and presents you a new discovery: a large container of wine. He says that he likes wine, and since he doesn't want to drink alone, he thought it would be nice to share a bottle of wine with a fellow human being.

"I thought you don't like to drink?" you say, confused.  
"I don't," he says, opening a bottle of wine and pouring some into two wine goblets.  
"I don't understand," you say.  
"So what is this all about?"  
He takes a sip of his wine and answers, "Elon is scared."

"Scared of what?"  
Elon gulps down the rest of his wine, leaving the glass empty.  
"Scared of dying."  
"I don't think I've ever seen you like this," you say, full of concern.  
"What's going on?"

He grabs your hand and stares at you. You can see an inner struggle of whether to keep his emotions bottled up or let it all out.  
"Elon, please tell me."  
He sighs and says, "I'm scared that I won't make it up there. That I won't be able to walk the last mile to Mars. That someone will find a way to stop me."

"What are you talking about?"  
"I'm talking about God, Mars, the final frontier. I'm talking about the imaginary factors we created to give ourselves meaning. I'm talking about the soul."

Musk gets up from his chair and begins to pace the room. You sit there, unsure of what to do. You can see how much he wants to confide in you but is afraid to.

"Please don't tell anyone. It would be tragic if everyone knew a man was afraid to die."



## AI X GPT-2 X AttnGAN

You say "Oh no, I just made it public on Twitter."  
"Why?!" "Because it's fun!" Elon looks at you and shakes his head.  
He goes to pour more wine in his glass, but there isn't any left.  
"I need to sleep," he says. "Good night."  
Elon gets up from his seat and leaves the room.

You stare at the empty wine bottle.  
"Well, that was weird."



# FANTASY

WRITTEN WITH ARTIFICIAL INTELLIGENCE



# STORY

## About 50% of the story was generated by AI

You are **Ellin**, a professional thief who was given a task to steal a magic stone. You were given information that the stone is kept by **Haleth**, a representative of a neighboring kingdom, who is going to the king of your kingdom on a diplomatic mission. And today **Haleth** is going to spend the night in the Drunken Raven Tavern. You do not know what this stone is for, but you will be paid a lot for it. You have a drawing and description of how the stone should look. And also the description of how **Haleth** should look. Besides, you were asked not to kill **Haleth** under any circumstances, but to steal the stone unnoticed. You are not going on this mission alone, but with your partner, who is a wizard and whose name is **Opik**. You and your partner enter the Drunken Raven Tavern. It's noisy and crowded there.

A lot of people are drinking, laughing and eating. You have been to this tavern many times, but never when someone important is staying there.

You find the tavern owner.

The baroness is the owner of this tavern. She is a red-haired beautiful woman, but she wears too much makeup and too much jewelry. She should be more elegant and refined.

You say "Good evening to you, lady Tek!"

"Good evening, beautiful. Opik and Ellin, are that you? Come on in, make yourself comfortable. I'll be with you in a moment."

The baroness comes from the kitchen and smiles at you.

You say "I heard guests of honor are coming to your tavern today."

"You heard correctly, beautiful. That's why I'm making sure my best staff is here to serve them."

Opik says "That's pretty impressive."

You say "And how soon will your guests arrive?"

"Right now, actually. As soon as they get off the royal ship. They should be in my tavern right now."

You say "Are you going to put them in your best room?"

"Of course, why would you even ask that? Do you know something I don't?"

You say "No, I'm just wondering..."

The baroness goes back to the kitchen and begins making drinks. You are about to drink a pint of beer when Opik whispers to you "They've arrived...I don't know what your plan is..."

Just a reminder, using magic in the presence of elves is not a good idea. They will immediately feel it."

"Got it."

You see Haleth enters the tavern.

A well-dressed elf walks into the tavern, he is accompanied by two guards. They look around the tavern, quickly walk to their best table and sit down. The guards stay standing.

You bribe the waitress and ask her to add sleeping pills to the food and drink of the elf and his guards.

You give the waitress money and ask her to add a sleeping pill to the food and drink of the guards and elf. The guards and elf will not notice this, when they drink the drinks.

You watch the elf drinking and eating.

The elf drinks a bottle of wine, then moves the bottle to his left hand and eats a slice of pork. He begins drinking again until the bottle is empty. The guards do not drink anything.

You wait until the guards and elf go to their room.

The elf and his guards get up from the table, the guards go to the door and open it. The elf walks beside them to his room, he does not notice that there is something wrong with his drinks. You wait.

The elf and his guards enter their room. You wait, and wait, but nothing happens. It is time to act.

You ask Opik to knock on the door and distract the elf's guards. Opik knocks on the door and says "Hello?" The guards turn quickly, but don't do anything else. "Dear guests, do you want more drinks?" Opik asks.

You sneak into the room through the window while Opik distracts the guards.

You quickly open the window and crawl into the room. There's a desk where the elf sleeps (maybe he fell asleep suddenly right here, because your sleeping pills began to work), a chest of drawers, a chair and a bed.

You search for magic stone.

You search the desk, but there is nothing.

You search the chest of drawers, but there is nothing.

You search the bed, but there is nothing.

You search inside elf's clothes for the magic stone.

You see the magic stone in the elf's pocket. It's a beautiful piece of crystal, which seems to give off a faint blue glow.

You steal the magic stone.

You hold the magic stone in your palm. It's quite heavy, you wonder how much magical power it contains. You hold the stone close to your ear and concentrate on it.

"This is definitely it..." you whisper.

You escape through the window and return to the tavern.

You quickly run through the window and return to the tavern. Opik tells you that the guards haven't seen you.

You say "Good job, Opik! Thank you for distracting the guards."

You say "Thank you for helping me, Opik."

Opik smiles and says "I did my job. You are welcome."

You tell Opik that you managed to steal the magic stone and show it to him.

You tell Opik that you managed to steal the stone and show it to him.

Opik looks at the stone and says "Oh, this?"

He tells you that the stone is a fake made of brass.

You look at the stone with surprise. The crystal that glowed in your hands a couple of minutes ago has really turned into a piece of brass.

You say to Opik "But a minute ago it was a glowing crystal... How is this possible? You are a magician, take a closer look at it."

Opik says "I am a wizard and I can say for sure you've found a fake one."

You are surprised and say "A fake? But..."

"I think it was the elf's magic of illusion to confuse people who want to steal the stone. And now this magic has dissipated and you can see its real appearance," Opik keeps convincing you.

"Give it to me, Ellin"

You give the magic stone to Opik.

Something about this whole situation seems strange to you, but you hand the stone to Opik and ask him if he can do anything with it. Opik looks at the stone for a moment and then says "Yes, as I said, it's an ordinary stone. But a good one. I'll take it and use it for my magic experiments."

"Hate magic artifacts. Always have problems with them..." you say.

Human

AI

William Porr Storytelling with machines workshops MARCH 8TH-12TH, 2021

POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY

DESIGNER: ANASTASIIA HAIDAR

TITLE: STEAL THE MAGIC STONE

TECHNOLOGY: AI DUNGEON





```
import poem
```

```
traits = ["feeling of loneliness", "disconnect from the world", "utter  
helplessness to do anything", "ai-generated text", "ai-generated title"]
```

```
def BeginningOfPoem():
```

```
>     It's barely there yet he feels it  
>     Pooling at the tips of his fingers  
>     As he lays stagnant in his bed
```

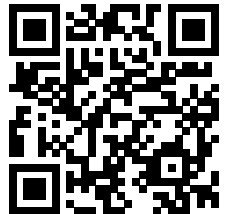
```
def AiWrittenPoem():
```

```
>     As falling snow clumps to leaves  
>     He has to tear his gaze from the attic roof.  
>     Reality has started to take flight.  
>  
>     Everything feels copacetic  
>     But indecipherable inside his mind.  
>     Sticking out, tauning him from afar  
>     This uncomfortable phrase.  
>     The more he tries to forget,  
>     The deeper into misery he drowns.  
>     He feels loneliness like pain between his shoulders;  
>     Always present, but briefly alleviating worries  
>     Seeing something else transgenic, distant,  
>     Something as pointless as paintings  
>     Filling all the sky behind his thick glasses  
>     It becomes the answer to every question.  
>  
>     Don't give him lines anymore.  
>     They're selling him cheap, let it go.  
>     He was tired when morning came,  
>     But he could not escape because  
>     Reality was clinging to his sleeve.  
>     He stayed up chanting words to himself,  
>     Then laughed at how absurd it was.  
>     Red and white clothes piled carefully beside him  
>     Yellow patches spilt with blues faint quite welcome  
>     Orchards whole and patched, hopeless slim presents  
>     Leave the computer only lightly scratching the poor eyes  
>     reading its dead pixels.  
>  
>     Are you still there? It's all wrong.  
>     Let the guilt consume you so you can fade.
```

# Ted Davis



Ted Davis is an educator / designer / media artist originally from the United States and based in Basel, Switzerland, where he teaches interaction design and coordinates the UIC/HGK International Master of Design program within the Visual Communication Institute, The Basel School of Design HGK FHNW. His research and teaching activities focus on generative design through creative coding, reactivating older 'new media' through newer programming means and the volatility of digital media through glitch. His open source projects (basil.js, XYscope, P5LIVE) enable designers to program within Adobe InDesign, render vector graphics on vector displays, and collaboratively create live coded visuals with p5.js. With international exhibits, lectures and workshops, he empowers students to take hold of the computer's ability to design possibilities beyond that of the hand or mouse.



# CREATE [L]IVE CODING

From iterative changes  
with instantaneous  
feedback, shapes, motion, typography  
explored in ways that typical  
software packages cannot provide.

The core objective of this workshop was to explore how creative coding can extend the realm of possibilities for typographic expression in motion without our web browsers. The workshop introduced participants to the realm of possibilities in generating designs by live coding as a technique of sketching. Using p5.js via P5LIVE, students learned the basics of creative coding, turned type into anchor points, and developed visuals by manipulating these coordinates with new geometric forms and motion. Finally they learned to control parameters with graphical user interface (GUI) elements, such as sliders, to create custom tools for their own usage and the public to explore.

Vlad Boyko | Anastasiia  
Yurchenko | Illia Dobniev |  
Jakub Przybylski | Orest  
Saldan | Sefa Sagir |  
Anastasiia Kopetska |  
Anastasiia Sushchuk | Cian  
Johem | Alick Radziyonava  
Ninjin Ganbold | Madina  
Mahomedova | Paweł  
Mucha and *p5.js*

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Ted Davis CREAT[L]IVE CODING workshops MARCH 8TH-12TH, 2021

POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY

DESIGNER: MADINA MAHOMEDOVA

TITLE: UNIVERSE

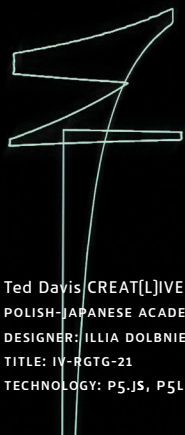
TECHNOLOGY: P5.js, P5LIVE





Ted Davis CREAT[L]IVE CODING workshops MARCH 8TH-12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: ILLIA DOLBNIIEV, VLAD BOYKO  
TITLE: IV-RGTG-21  
TECHNOLOGY: P5.JS, P5LIVE





IV-RGTG-21 is an experimental type distortion generator, based on the deconstruction of glyph shapes. It contains 3 distortion presets, allowing a user to customise the displacement and amount of points in the shape.



SPACEBAR FOR JUMP AND RESTART

SCORE:100



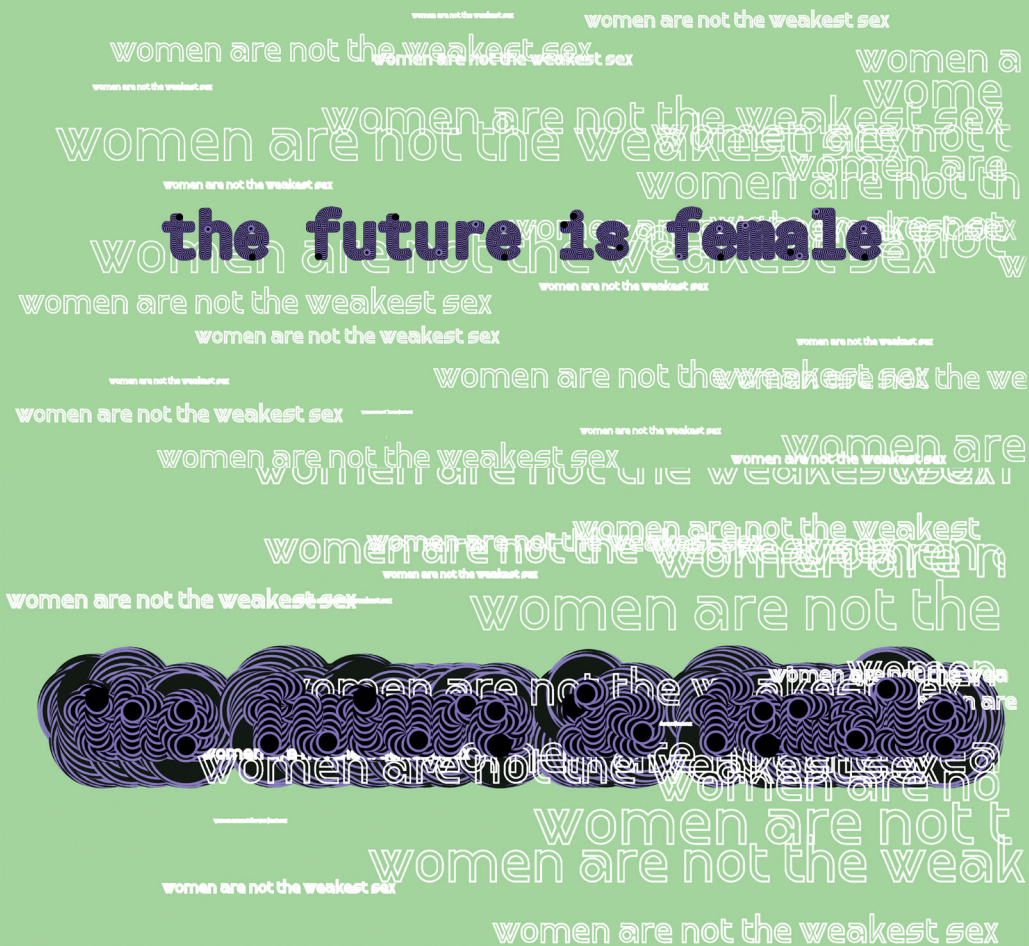
GAME OVER



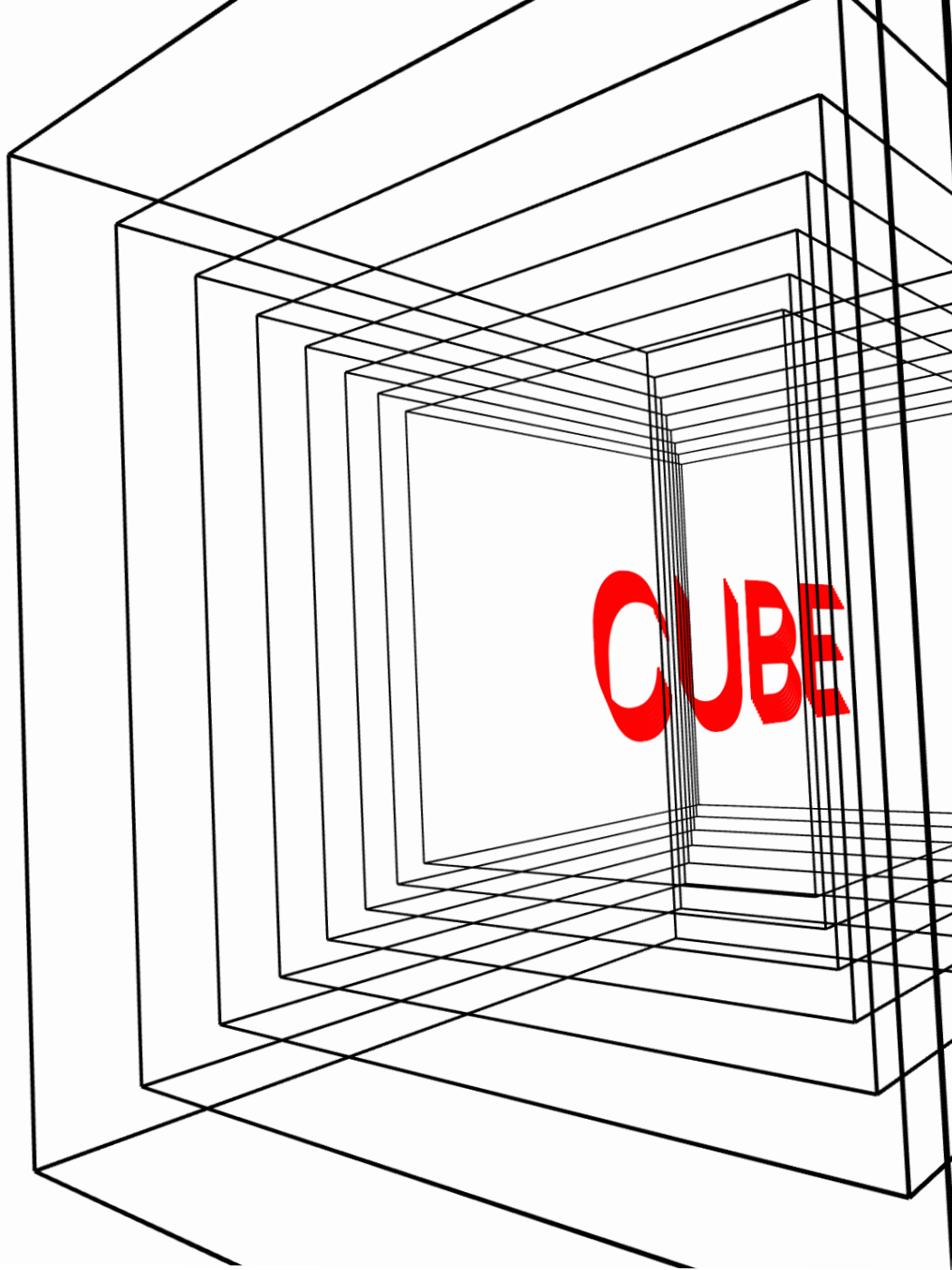
COD[G]AME mini-game was created using p5live coding platform. This code shows and proves that it is quite possible to create a game in a week! It's a time-killed kind game, true saver from absolute boredom and it is inspired by the famous dinosaur T-Rex from the Google







The code for design was created using p5live coding platform. The code has four sliders for such editing options as: colorpicker, size of the text, number of the points, position of the text. With our project, we once again wanted to draw attention to the fact that women are not the weaker sex and to emphasize that, a lot depends on women, including our future.

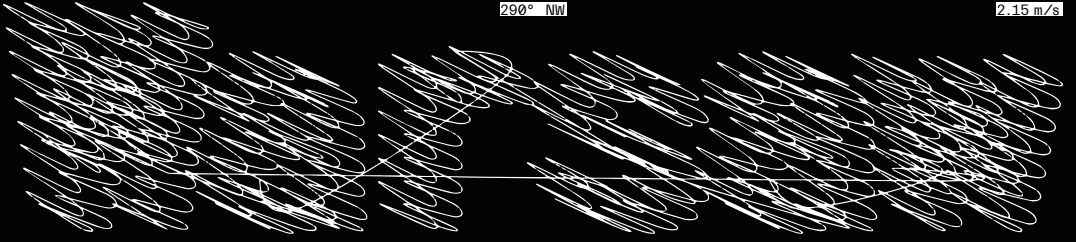


Ted Davis CREAT[L]IVE CODING workshops MARCH 8TH–12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: JAKUB PRZYBYLSKI, OREST SALDAN  
TITLE: CUBE  
TECHNOLOGY: P5.JS, P5LIVE



290° NW

2.15 m/s



15/03/2021 17:39:55

150° SE

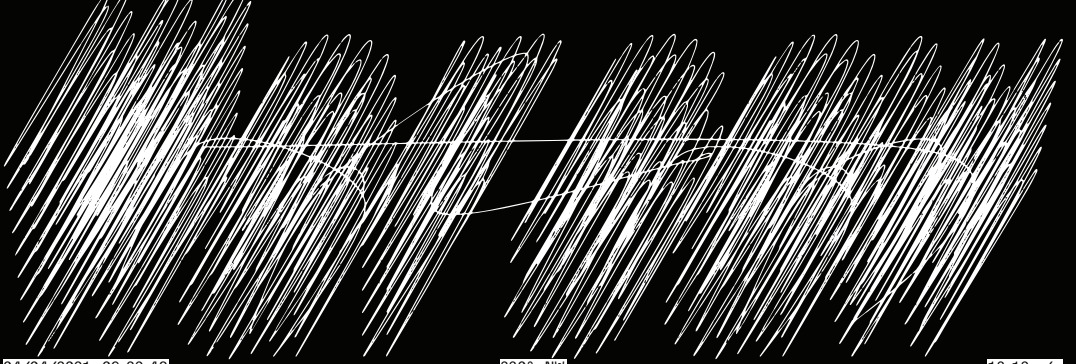
4.63 m/s



18/03/2021 22:04:33

40° NE

7.33 m/s

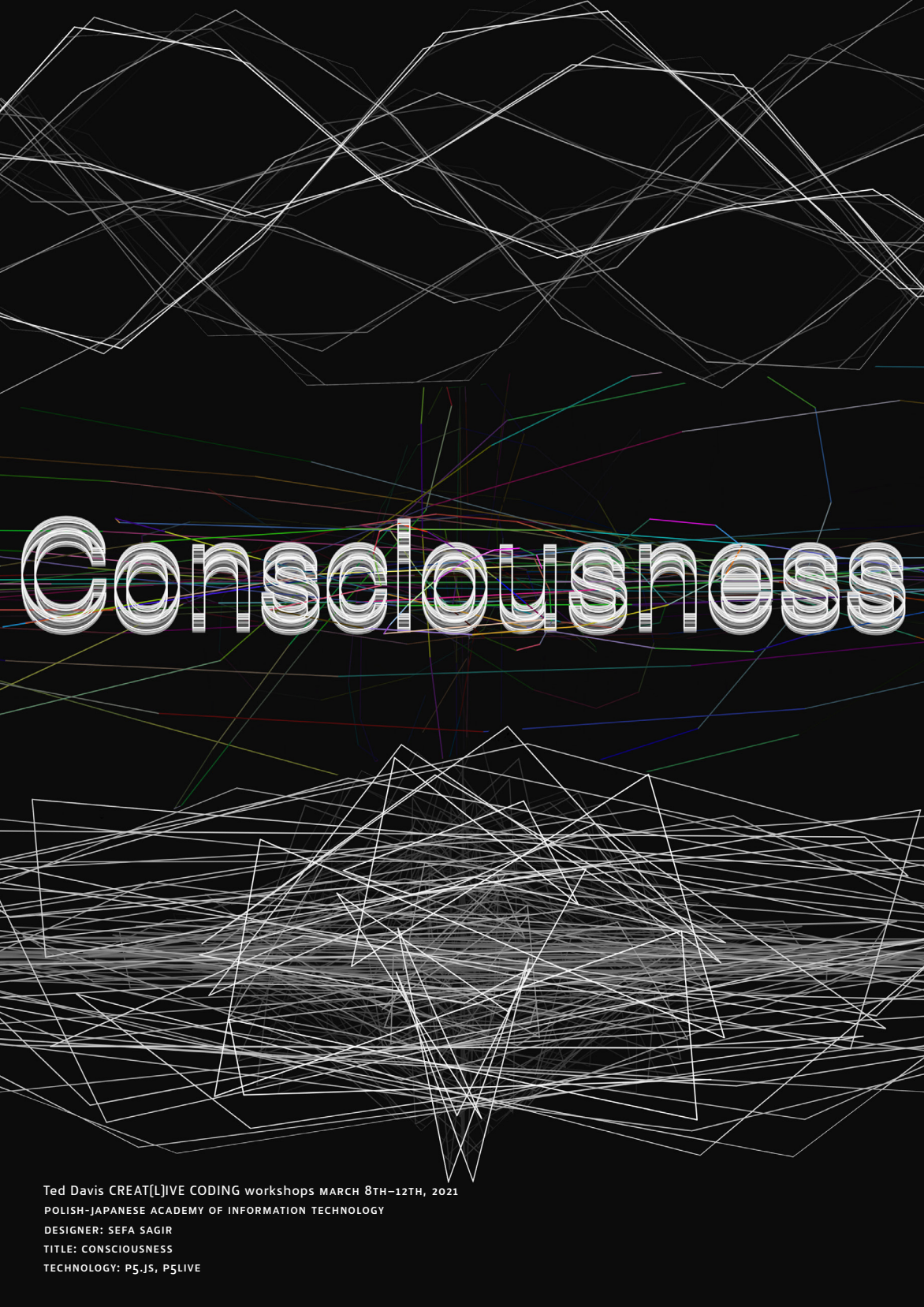


04/04/2021 09:22:48

330° NW

13.12 m/s





# Consciousness

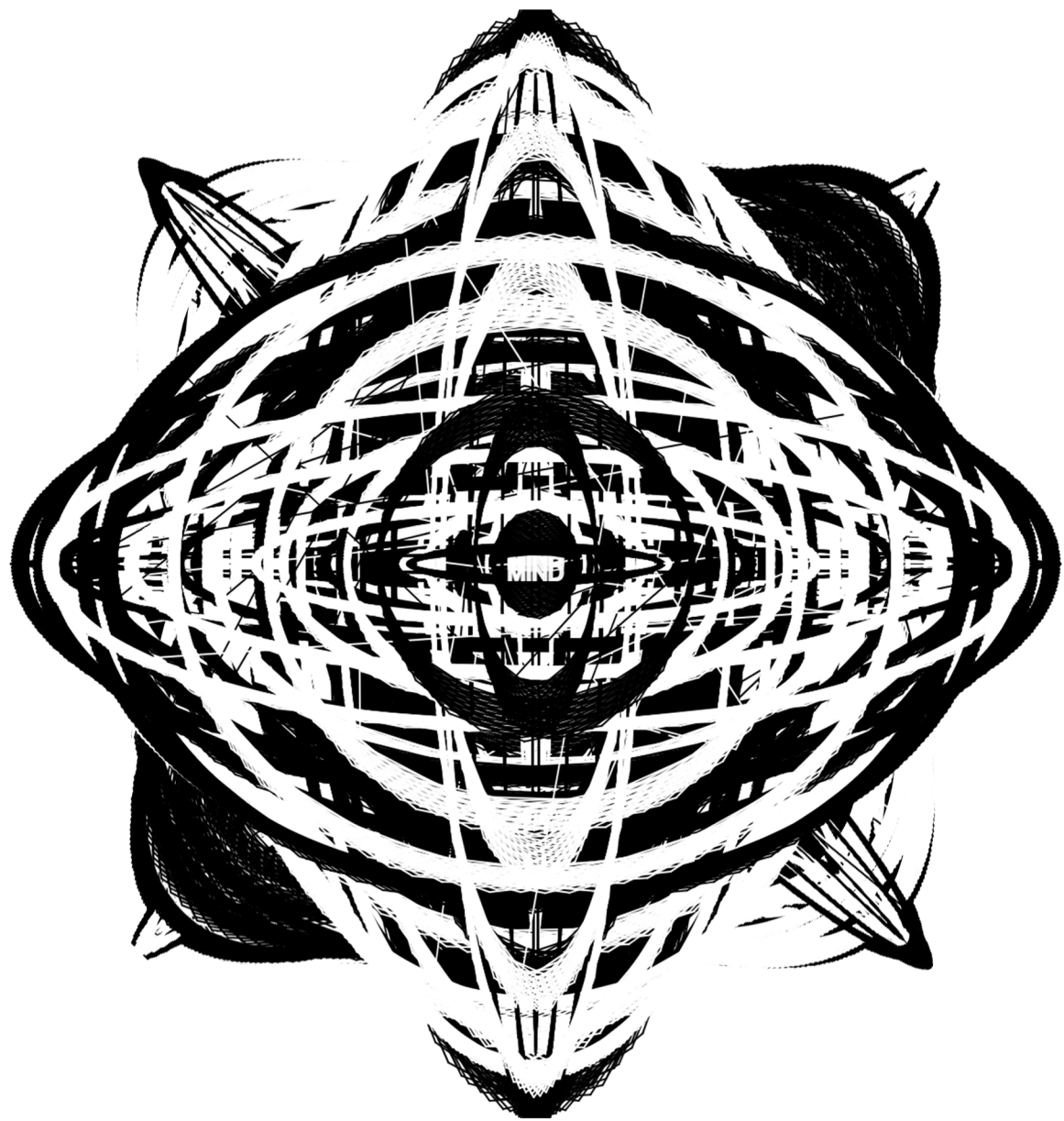
Ted Davis CREAT[L]IVE CODING workshops MARCH 8TH–12TH, 2021

POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY

DESIGNER: SEFA SAGIR

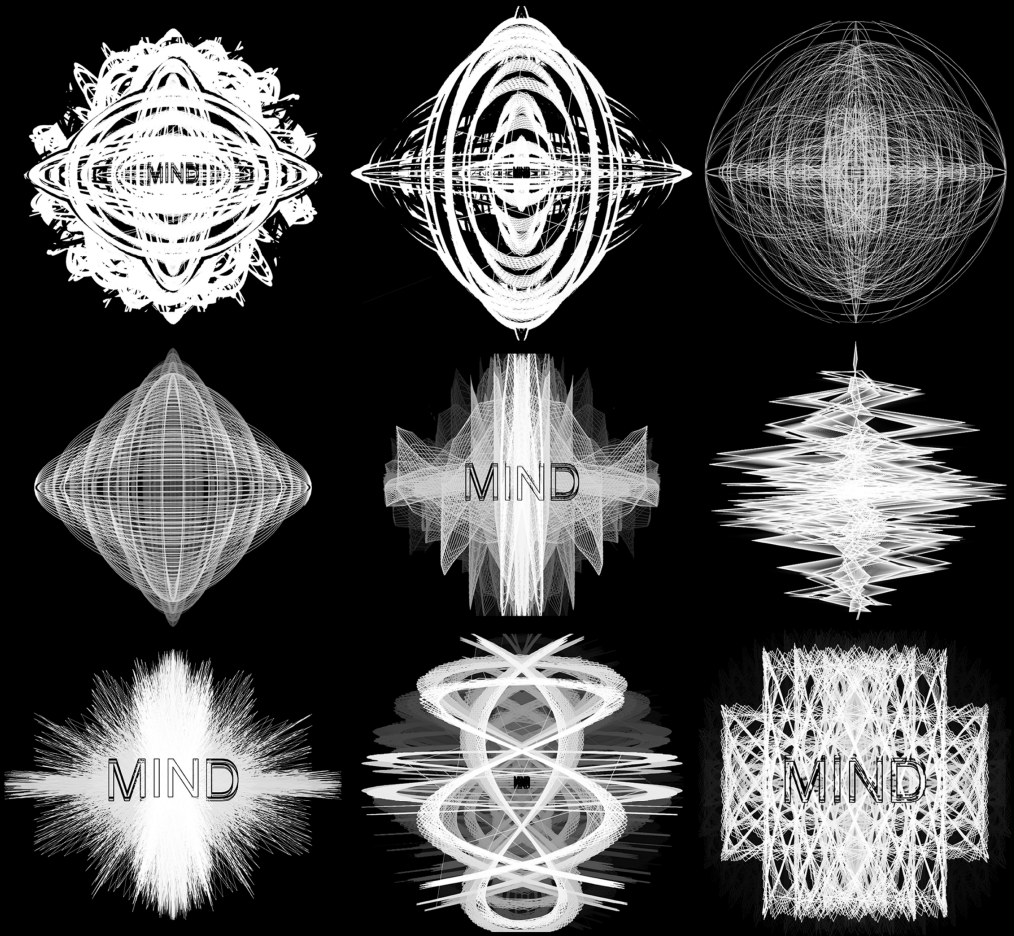
TITLE: CONSCIOUSNESS

TECHNOLOGY: P5.JS, P5LIVE



Ted Davis CREAT[L]IVE CODING workshops MARCH 8TH–12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: PAWEŁ MUCHA  
TITLE: MIND  
TECHNOLOGY: P5.JS, P5LIVE





Maciej Wawer | Semyon  
Fedichev | Oles Samko |  
Yulia Yu | Maksym Shadiy |  
Constanze Stepan | Maira  
Fakorelli and *p5.js*

# Hartmut Bohnacker



Born in 1972 in southern Germany. Beginning in 1992: studies in mathematics (discontinued) and a degree in economics in 1997. 1998: studied communication design at the HfG Schwäbisch Gmünd. Since completing studies in 2002: independent designer in Stuttgart, specializing in conception, design, and prototypical implementation of projects in the field of interface and interaction development; teacher of digital media. Since 2009: professor of interaction design at the HfG Schwäbisch Gmünd.





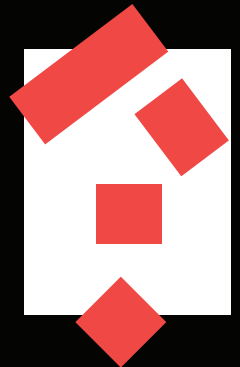
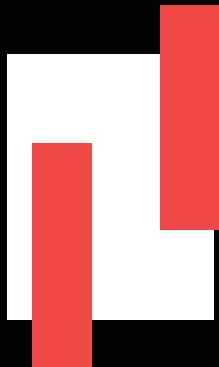
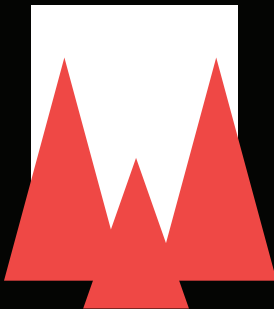
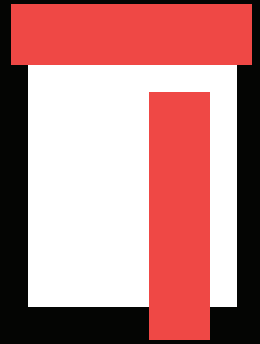
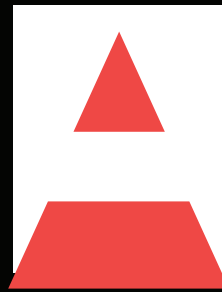
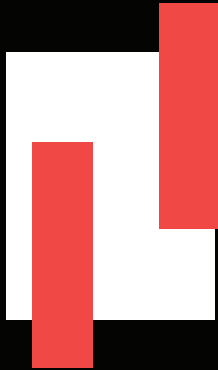
# Interactive Type using p5.js

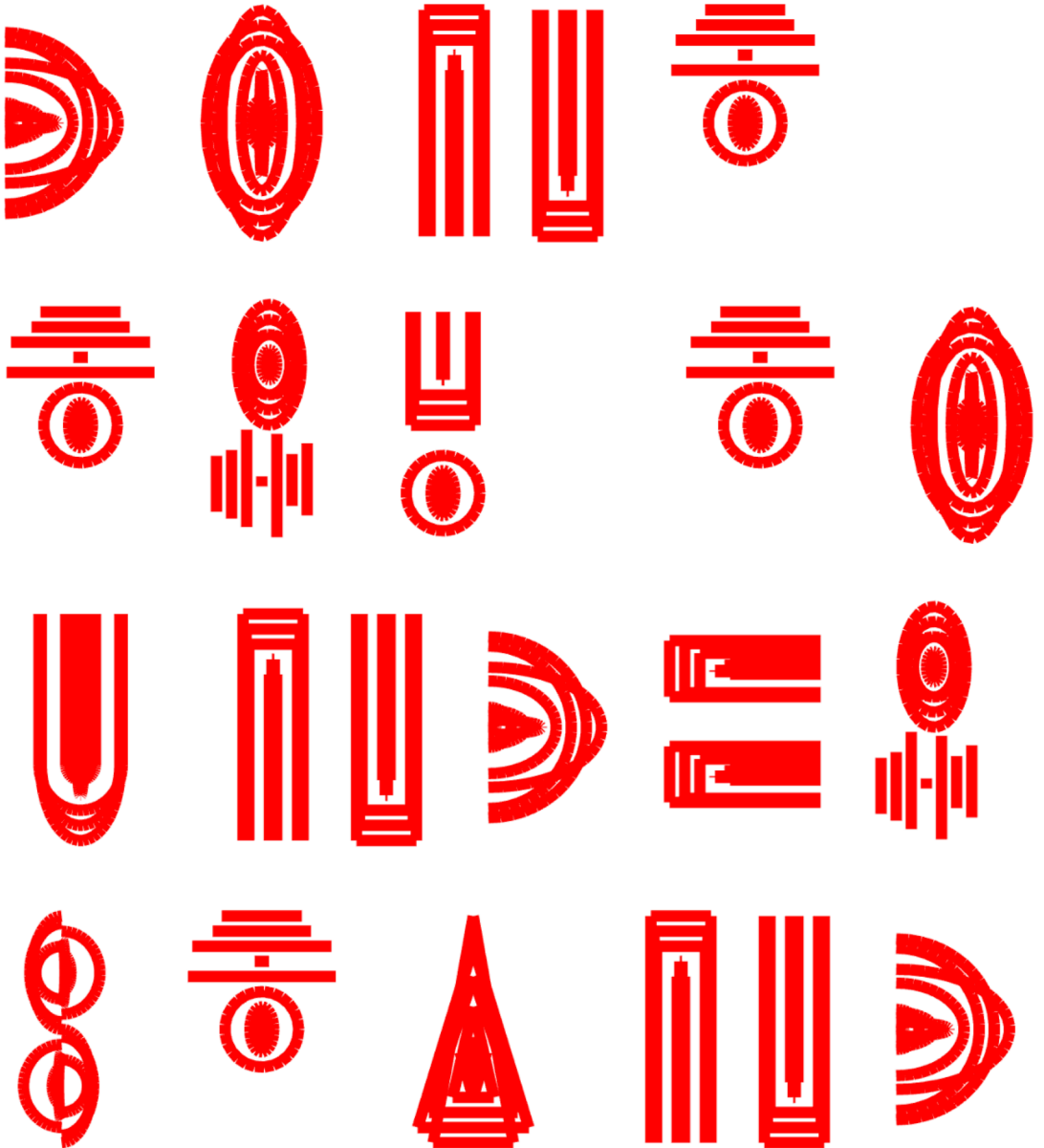
p5.js is a Javascript library that takes the spirit from Processing and translates it to Javascript. Its goal is to make coding accessible for designers by making it as easy as possible to draw graphical output to the screen.

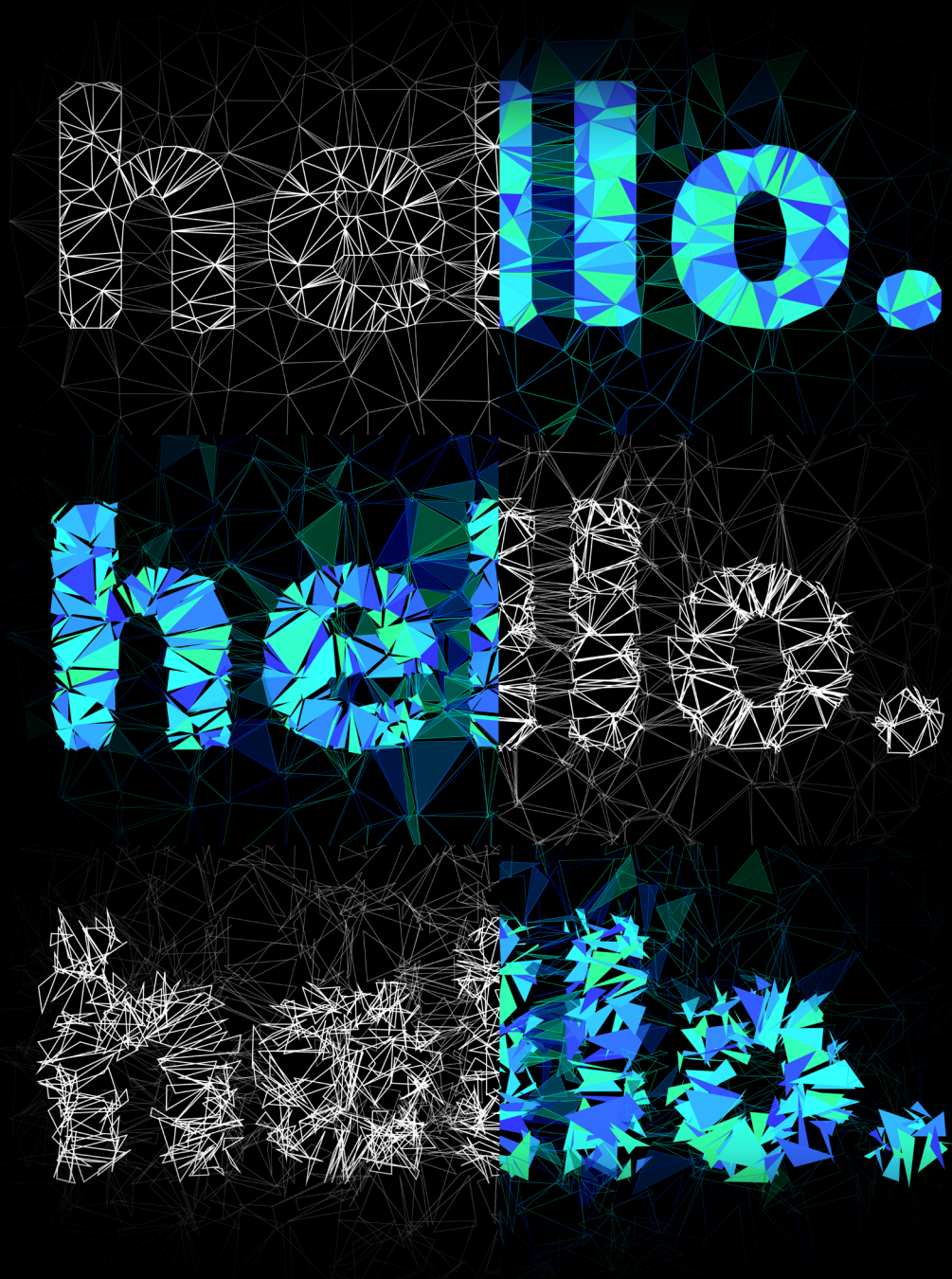
This workshop introduced the students to p5.js and to the basics of programming in that environment starting from zero. During the workshop students were creating some experiments on interactive type. Drawing graphics with code is different from drawing with pen or using software like Adobe Illustrator. Instead of placing shapes manually, one has to find rules for the machine to follow. The students have learnt how to think algorithmically and to write the appropriate code. Exploring the drawing abilities of p5.js like dealing with color, shapes, type, 3D space and how to make their graphics interactive and animated were the most important objectives for the workshop. The course outcomes were delivered in the form of p5.js programs.



# What and Why?







Hartmut Bohnacker: Interactive Type using p5.js, MARCH 8TH-12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: MACIEJ WAWER  
TITLE: TRIANGULATION  
TECHNOLOGY: P5.JS, P5LIVE, MS VISUAL STUDIO CODE



STRONG

WOMAN

WOMAN

POWER



S O M E T I M E S H I G H

SOMETIMES LOW

SOMETIMES HIGH

S O M E T I M E S L O W

Hartmut Bohnacker Interactive type workshops MARCH 8TH-12TH, 2021

POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY

DESIGNER: MAIRA FAKORELLI

TITLE: SOMETIMES HIGH SOMETIMES LOW

TECHNOLOGY: P5.JS, P5LIVE





Hartmut Bohnacker Interactive type using p5.js workshops MARCH 8TH-12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: MAKSYM SHADIY  
TITLE: ALIEN LANGUAGE  
TECHNOLOGY: P5.JS, P5LIVE







Hartmut Bohnacker Interactive type using p5.js workshops MARCH 8TH-12TH, 2021  
POLISH-JAPANESE ACADEMY OF INFORMATION TECHNOLOGY  
DESIGNER: MAKSYM SHADIY  
TITLE: ALIEN LANGUAGE  
TECHNOLOGY: P5.JS, P5LIVE



## **Data Ethics Framework: Glossary and Methodology by Central Digital & Data Office**

### **AI**

AI can be defined as the use of digital technology to create systems capable of performing tasks commonly thought to require intelligence. AI is constantly evolving, but generally it:

- involves machines using statistics to find patterns in large amounts of data
- is the ability to perform repetitive tasks with data without the need for constant human guidance

### **AI Dungeon**

AI Dungeon is a free-to-play single-player and multiplayer text adventure game which uses artificial intelligence to generate unlimited content. It also allows players to create and share their own custom adventure settings. AI Dungeon is a text adventure game; however, unlike traditional text adventure games, which use pre-written content, AI Dungeon uses artificial intelligence to generate effectively limitless open-ended storylines.

### **Algorithm**

A set of step-by-step instructions. Computer algorithms can be simple (if it's 3pm, send a reminder) or complex (identify pedestrians).

### **Data**

In general, data can be understood as discrete values and statistics collected together for reference or analysis. When we refer to data, we mean both data about people generated through their interactions with services, and also data about systems and infrastructure such as businesses and public services. Data can be operational (collected in the process of running services or businesses), as well as analytical and statistical. Personal data means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

### **Data ethics**

Data ethics is an emerging branch of applied ethics that studies and evaluates moral problems and describes the value judgements related to data (including generation, recording, curation, processing, dissemination, sharing and use), algorithms (including artificial intelligence, artificial agents, machine learning and robots) and corresponding practices (including responsible innovation, programming, hacking and professional codes), in order to formulate and support morally good solutions (for example right conducts or right values). Data ethics encompasses a sound knowledge of data protection law and other relevant legislation, and the appropriate use of new technologies. It requires a holistic approach incorporating good practice in computing techniques, ethics and information assurance.

The aim of data ethics is to promote responsible and sustainable use of data for the benefit of people and society and ensure that knowledge obtained through data is not used against the legitimate interests of an individual or group while identifying and promoting standards, values and responsibilities that allow us to judge whether decisions or actions are appropriate, 'right', or 'good'

## **Data quality**

The state of qualitative or quantitative pieces of information. There are many definitions of data quality but data is generally considered high quality if it is 'fit for [its] intended uses in operations, decision making and planning'.

## **Machine learning**

Machine learning is a subset of AI, and refers to the development of digital systems that improve their performance on a given task over time through experience. Machine learning is the most widely-used form of AI, and has contributed to innovations like self-driving cars, speech recognition and machine translation.

## **p5.js**

p5.js is a JavaScript library used for creative coding. It is based on Processing which is a creative coding environment. The main focus of processing is to make it easy as possible for beginners to learn how to program interactive, graphical applications, to make a programming language more user-friendly by visualizing it. The advantage of using the JavaScript programming language is its broad availability and ubiquitous support: every web browser has a JavaScript interpreter built-in, which means that p5.js programs can be run on any web browser. Also, Processing is that language which emphasizes on feasibility for programmers to create software prototypes very quickly, to try out a new idea or see if something works. For this reason, Processing (and p5.js) programs are generally referred to as "sketches."

