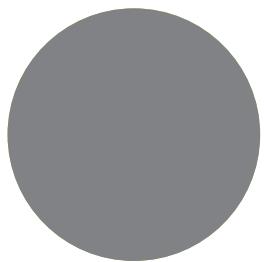




FESTIVAL NOVOMEDIJSKE KULTURE  
**SPECULUM ARTIUM 2021**



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Trinajsti festival novomedijske kulture Speculum Artium tudi v letu 2021 vsebinsko prepleta spoznanja preteklosti, dogajanja v sedanjosti in vizijo daljne prihodnosti. Vsakoletno predstavljive umetniški deli so prerasle okvire festivala, ki letos doživlja tako vsebinsko kot reprezentativno preobrazbo. Festivalski program, namenjen obiskovalcem in strokovni javnosti, v središče postavlja pet temeljnih področij: umetnost – tehnologija in znanost – gospodarstvo – turizem. Slednja predstavljajo temelje festivala že od njegovih začetkov, v prihodnosti pa želimo okrepliti povezovanja med njimi ter jih še močnejše preplesti. Revolucija digitalizacije in razmah spletnih ter digitalnih vsebin v vseh sektorjih in na vseh področjih delovanja sta v zadnjih nekaj letih povezala tako civilno družbo kot akademski svet, javni sektor in gospodarstvo. Festival Speculum Artium odraža tudi te spremembe ter povezave in jih skuša vplesti v vizijo delovanja Delavskega doma Trbovlje.

Program festivala je sestavljen iz petih vsebinskih sklopov. Rdečo nit letos nosi najstarejša kibernetična, računalniško vodenega skulptura iz leta 1970, Senster, ki jo umeščamo v umetnostno-zgodovinski kontekst prvih zametkov intermedejske in sodobne umetnosti. Ob Sensterju se v prvi sklop uvrščajo še umetniška dela, izbrana na javnem natečaju. Drugi sklop obsegajo dela študentskega tekmovalnega programa, tretjega pa dela, ki jih snujemo pod znamko »Made in Trbovlje« in vključujejo predstavitev aktivnosti, ki se izvajajo v okviru projekta RUK – Mreža centrov raziskovalnih umetnosti in kulture, ter druge lokalne projekte. Samostojni sklop predstavlja letos že enajsti mednarodni festival video umetnosti DigitalBigScreen, ki poleg videov, izbranih na javnem natečaju, prinaša tudi umetniška dela v virtualnem svetu. Velik del festivalskega dogajanja prispeva sklop spremljevalnega programa v obliku koncertov, performansov, delavnic za otroke in mladino, pogоворov ter vodenj po razstavnem delu. Posebna pozornost je namenjena spletnemu programu, ki še dodatno bogati festivalsko dogajanje.

Letošnja izvedba festivala ima nekoliko podaljšano življenjsko dobo, saj bodo nekatere dela, vključno z legendarnim Sensterjem, na ogled od 23. septembra do 2. oktobra 2021. Prav tako se bodo v pofestivalskih dneh odvile nekatere delavnice in druge aktivnosti.

mag. Špela Pavli Perko

The 13th edition of the Speculum Artium 2021 new-media festival intertwines past realizations with current events and visions of a distant future. This year, the festival outgrew itself and is undergoing a transformation in regard to its content and representation. The festival program, intended for laymen and the professionals alike, focuses on five basic topics: art, technology, science, economy and tourism - all of which have served as a foundation to our work ever since the beginning. It is our aim to intertwine and interconnect them even more in the future. In the past few years, the Revolution of digitalization and the proliferation of online and digital content in all sectors and in all areas of activity have brought together civil society, academia, the public sector and the economy. The Speculum Artium Festival also reflects these changes and connections and tries to incorporate them into the vision of Delavski dom Trbovlje.

The festival program consists of five thematic sets. Under the spotlight this year we find the Senster, the oldest cybernetic, computer-controlled sculpture which dates back to 1970, and can be placed into the artistic and historical context of the first beginnings of intermedia and contemporary art. Along with Senster, the first thematic set also includes works of art selected in a public contest. The second set is a collection of works from the student competition program, while the third presents projects designed under the brand »Made in Trbovlje« and includes a presentation of activities carried out within the project RUK - Network of Art and Cultural Research Centers, as well as some other local projects. The independent set comprises the 11th edition of DigitalBigScreen, an international festival of video art which, in addition to the videos selected in a public contest, also includes several other artistic VR projects. The extensive accompanying program features concerts, performances, workshops for children and youth, talks and guided tours of the exhibition, while the online part of the program further enriches the festival events.

All works of art, including the legendary Senster, will be on display for a slightly extended period from September 23 to October 2. Some of the workshops and other activities will also take place during the post-festival days.

Špela Pavli Perko, M.A.

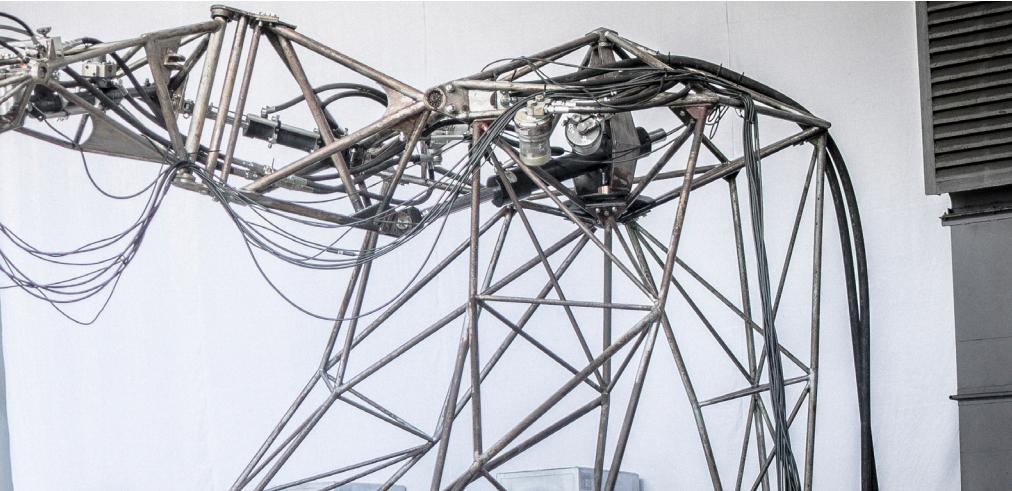


## Edward Ihnatowicz (PL) - The Senster / RE:Senster 2017-2018



Edward Ihnatowicz (rojen 1926 v Chełm Lubelskem, umrl 1988 v Londonu) je večino časa živel v Londonu, kjer je ustvarjal kot kipar in oblikovalec s tehnikami vlivanja kovine. Obiskoval je Ruskinovo šolo za risanje v Oxfordu. V šestdesetih letih prejšnjega stoletja je pričel združevati organskim podobne lite podobe s hidravličnimi sistemi in električnimi senzorji. James Gardner je v imenu Podjetja Philips Technology Ihnatowicza povabil, da skulpturo ustvari še v večji obliki. Tako je nastal Senster, ki so ga junija 1970 z ladjo pripeljali na Nizozemsko in ga razstavili v Evoluonu v Eindhovenu. V letih, ki so sledila, se je Edward Ihnatowicz pridružil inženirskim mrežam.

Senster je odličen prikaz zgodnje medijske umetnosti. Edward Ihnatowicz je v času, ko je bila kibernetika na vrhuncu svoje priljubljenosti, prevedel koncepte, kot sta povratna zanka in nadzorni inženiring, v izvirno obliko časovno zasnovanega umetniškega dela – v kibernetiko skulpturo. Jekleni skelet skulpture z nežnimi gibi sledi zvoku, ki prihaja iz okolice, kar abstraktni podobi vdahne občutene žive(če)ga bitja. Leta 1970 je po stopinjah Schöfferjeve kinetične umetniške skulpture »CYSP 1« (1956) in Le Corbusierjeve, Xenakisove in Varèsove »Poème électronique« predstavljene v Philipsovem paviljonu (1958), Ihnatowiczeva skulptura postala eden glavnih umetniških projektov, ki jih je podprla družba Philips. Ko so sredi sedemdesetih let prejšnjega stoletja razstavo odpovedali, je bil Senster uvrščen na seznam izgubljenih projektov medijske umetnosti. V letih 2017 in 2018 je bila skulptura obnovljena v okviru projekta Re:SENSTER. Univerza AGH za znanost in tehnologijo v Krakovu jo je odkupila in jo v sodelovanju s Fakulteto za intermedijsko umetnost na Akademiji za likovno umetnost ponovno aktivirala. Trenutno je spravljen na AGH Fakulteti za humanistične študije. Mreža Re:Senster tako še naprej deluje na področju humanistično inženirskih raziskav.



Edward Ihnatowicz (b.1926 in Chełm Lubelski – d.1988 in London) was a London-based artist: sculptor and designer working in cast metal techniques. Attended the Ruskin School of Art and Drawing in Oxford. In the 1960's he took on combining organic-like cast forms with hydraulic systems and electronic sensors. Ihnatowicz was invited by James Gardner, on behalf of the Philips technology company, to create a large-scale piece. In June 1970 the SENSTER was shipped to the Netherlands to be installed at Evoluon, Eindhoven. In the following years, Edward Ihnatowicz joined engineering networks.

The Senster is a fine example of early media art. Working during the peak popularity of cybernetics, Edward Ihnatowicz translated concepts like feedback loop and control engineering into an original form of time-based work of art - a cybernetic sculpture. Steel skeleton of the sculpture moves delicately corresponding to the sound in its surroundings, the abstract form gains the feeling of a live creature. In 1970 the piece became one of the major art projects supported by the Philips company, following in the steps of Nicolas Schöffer's kinetic art sculpture »CYSP 1« (1956) and Le Corbusier, Iannis Xenakis and Edgard Varèse's "Poème électronique" in the Philips Pavilion and environment (1958). After display cancellation in the mid-1970s, the piece was put on the list of lost media art projects. In 2017-2018 the piece was restored by the Re:SENSTER project. AGH University of Science and Technology in Krakow purchased and reactivated the piece in collaboration with fellows from the Fine Arts Academy Faculty of Intermedia. At present, it is housed at the AGH UST Faculty of Humanities. Re:Senster network continues to function within humanities-engineering research domain.

## Grzegorz Biliński (PL) - Senster - video zapiski o vrnitvi / video notes on return



Senster, ki ga je ustvaril Edward Ihnatowicz, je bil prva robotska skulptura, ki jo je upravljal računalnik. Mislili smo, da je to pomembno delo robotske umetnosti za vselej izgubljeno. Pred nekaj leti pa se je začel projekt njegove rekonstrukcije in reaktivacije, ki smo ga po preoblikovanju preimenovali v Re:Senster.

Člani rekonstrukcijske ekipe Grzegorz Biliński, Alicja Duzel-Bilińska in Amadeusz Ferduła so posneli zgodbo o njegovi vrnitvi. Posneti zapisi in sestanki so gradniki dokumentarnega filma, kratke video oblike. Film o Sensterjevi obnovi je sestavljen iz več kratkih epizod.

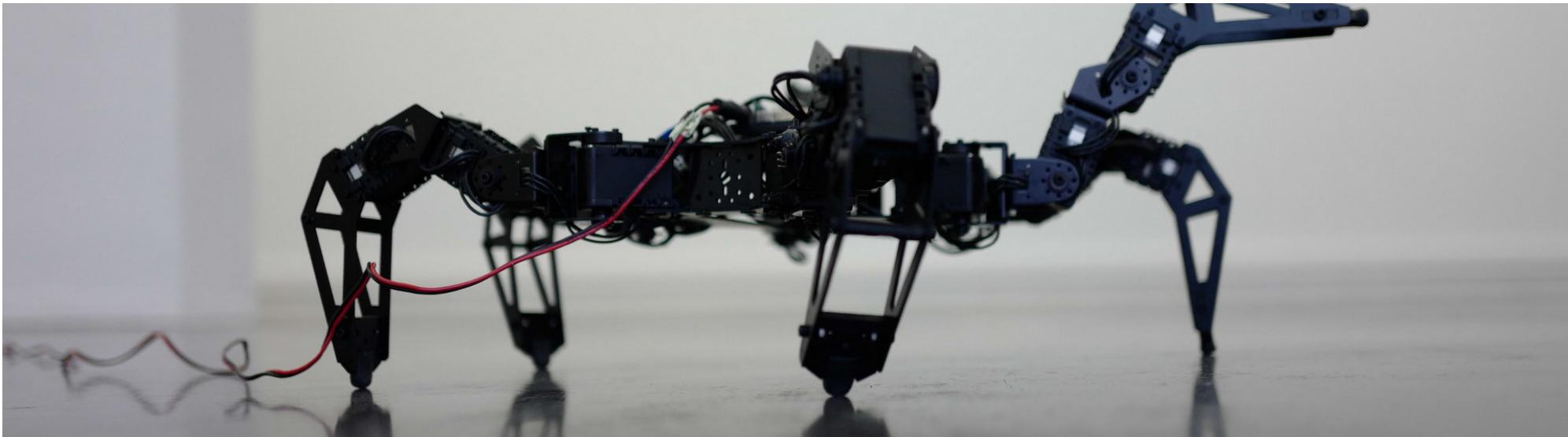
Prva prikazuje zgodbo o tem, kako so Senster pripeljali v poljski Krakow, ostale pa zajemajo še intervju z Edwardovim sinom Richardom Ihnatowiczem, rekonstrukcijo okostja, obnovo elektronskega gibanja ipd. Na festivalu bomo v obliki video instalacije predstavili tri sedem do deset minut dolge epizode.

The Senster, created by Edward Ihnatowicz, was the first robotic sculpture to be controlled by a computer. That very important work of robotic art was considered lost. A few years ago, however a project began of reconstructing and reactivating the Senster which after the reconstruction, it was named Re:Senster.

As a part of the team doing the reconstruction, Grzegorz Biliński, Alicja Duzel-Bilińska, and Amadeusz Ferduła made a film recording of the process of its return. Those filmed notes and meetings constitute the building blocks of a documentary – a sort of short video form. A film showing Senster's recovery consists of short episodes.

The first episode shows the story about bringing the sculpture to Krakow (Poland). Other parts include: an interview with Richard Ihnatowicz (Edward's son), skeleton reconstruction, reconstruction and construction of electronic-movement, etc. Three 7 to 10 minutes long episodes will be presented at the festival in the form of a video installation.

## Fabien Zocco (FR) - Pajek in jaz / Spider and I



Heksapod (tj. robot s šestimi nogami, ki je videti kot velik mehanski pajek) se premika po tleh. Opazimo lahko, da se včasih vede mirno, drugič pa nezaupljivo ali agresivno. Njegovi gibi ustvarjajo nenavadno in umetno koreografijo, ki temelji na menjavanju različnih hitrosti in drobnih gibih šesteronožca. Spremembe v vedenju so neposredno povezane z mojim lastnim čustvenim stanjem. Za časa trajanja razstave nosim pametno zapestnico, s katero v realnem času preko omrežja pošiljam robotu svoje biometrične podatke. Partnerstvo z laboratorijem SCALAB (Kognitivne in afektivne znanosti, CNRS - Univerza v Lilliu, Francija) se osredotoča na obdelavo teh biometričnih podatkov, da bi v realnem času prepoznali spremembe mojih čustvenih stanj.

Projekt Pajek in jaz želi združiti človeške, živalske in umetne elemente, saj se robotika vse bolj navdušuje nad živalskimi oblikami (kot so na primer slavni vojaški širinožni roboti, ki jih je razvilo bostonsko podjetje za dinamiko). Heksapod se bo predstavil kot animirana skulptura, z močnim kontrastom med svojimi mehanskimi značilnostmi na eni ter »živimi« gibi, vedenjem in dejanji na drugi strani. Videz pajka daje robotu nenanaden in moteč pridih.

S takšnimi zoološko-mehaničnimi referencami delo preizpravi pojem mimikrije, saj stroj posnema žival, medtem ko na njegovo vedenje vpliva tok podatkov, ki izvirajo iz ravnanja človeka. Moje fizično in čustveno stanje, prevedeno skozi srčni utrip in mikro-potenje dlani, neposredno vpliva na to, ali bo robotovo vedenje agresivno ali prijateljsko.

A hexapod (i.e., a robot with six legs looking like a big mechanical spider) is moving on the ground. Its behaviors seem to alternate calm moments and attitudes of distrust and aggressiveness. The movements of the robot set up a strange and artificial choreography through the multiple speed variations and the slight movements of the hexapod. These shifts of behavior are directly linked to my own emotional state. I am equipped with a smart wristband while the work is exhibited, in order to send my biometrical data to the robot in real time through the network. A partnership with the SCALAB Laboratory (Cognitive Sciences & Affective Sciences, CNRS – Lille University, France) focused on the analysis of these biometrical data in order to identify in real time my shifts of emotions.

Spider and I intends to mix human, animal and artificial elements, as robotics is precisely more and more inspired by animal forms of life (we can see it, for instance with the famous military quadruped robots developed by the Boston dynamics company). This hexapod will present itself as an animated sculpture, with a strong contrast between its mechanical aspect on one hand, and with the »living« qualities of its movements, behaviors, and actions on the other hand. The spider-like appearance of the robot gives him a strange and disturbing aspect.

With these zoo-mechanical visual references, the work questions the notion of mimesis, as the machine imitates animals while its behavior is influenced by a stream of data from a specific human activity.

## Linda Kronman (FI) & Andreas Zingerle (AT) - Sumljivo vedenje / Suspicious Behavior



Sumljivo vedenje kolektiva KairUs, ki ga sestavlja Linda Kronman (Finska) in Andreas Zingerle (Avstria), prikazuje svet skritega človeškega dela, ki gradi temelje za razumevanje, kako si »inteligentni« sistemi računalniškega vida razlagajo naša dejanja. Uporabnik se s pomočjo vzpostavljene domače pisarne in vodnika za označevanje slik seznanji z monotonim delom zunanjih izvajalcev, ki delajo kot spletni nadzorniki.

Interaktivni vodnik fiktivnega podjetja uporabnika motivira in ga nauči, kako prevzeti nalogo označevanja sumljivega vedenja. Video posnetke smo pridobili iz različnih podatkovnih nizov strojnega učenja za nadzor in odkrivanje dejanj, ki so prosto dostopni.

Suspicious Behavior by KairUs, Linda Kronman (Finland) and Andreas Zingerle (Austria), shows a world of hidden human labour, which builds the foundation of how 'intelligent' computer vision systems interpret our actions. Through a physical home office set-up and an image labelling tutorial the user traverses into experiencing the tedious work of outsourced annotators.

In an interactive tutorial for a fictional company the user is motivated and instructed to take on the task of labelling suspicious behavior. The video clips in the tutorial are taken from various open machine learning datasets for surveillance and action detection.

## Barbara Jazbec (SI), Kristina Tica (SRB) - POWER STRANGERS



POWER STRANGERS je interaktivna video in avdio instalacija v realnem času, sestavljena iz spletnih kamер, projektorja in posode z vodo, v kateri je reaktivna sluz, in temelji na prilagojenem algoritmu zaznavanja obrazov. Ko se gledalec približa instalaciji, kamera v živo spremi njegov obraz. Podatki, ki jih je zaznala kamera, so obdelani in projicirani v rezervoar, šele ko se gledalec obrne stran od naprave, zato nikoli ne more videti projekcije svojega obraza.

Te izrisane podobe nato prežijo za hrbiti gledalcev. Od njih so hkrati odrezane in odvisne, zato postanejo njihovi duhovi. Sodobni duhovi živijo v digitalnih podatkih in dajejo moč avtomatiziranim nadzornim sistemom. S tem ko neutrešeno virtualno navzočnost odtrgamo od njene žive izkušnje, nas začnejo preganjati naši lastni duhovi v podobi naših digitalnih zapisov. V kontekstu prikazologije (hauntology) in retro-futurizma je cilj projekta predstaviti trenutno stanje komodifikacije oziroma ublagovljenja v odnosu do kapitalizma globalnega nadzora.

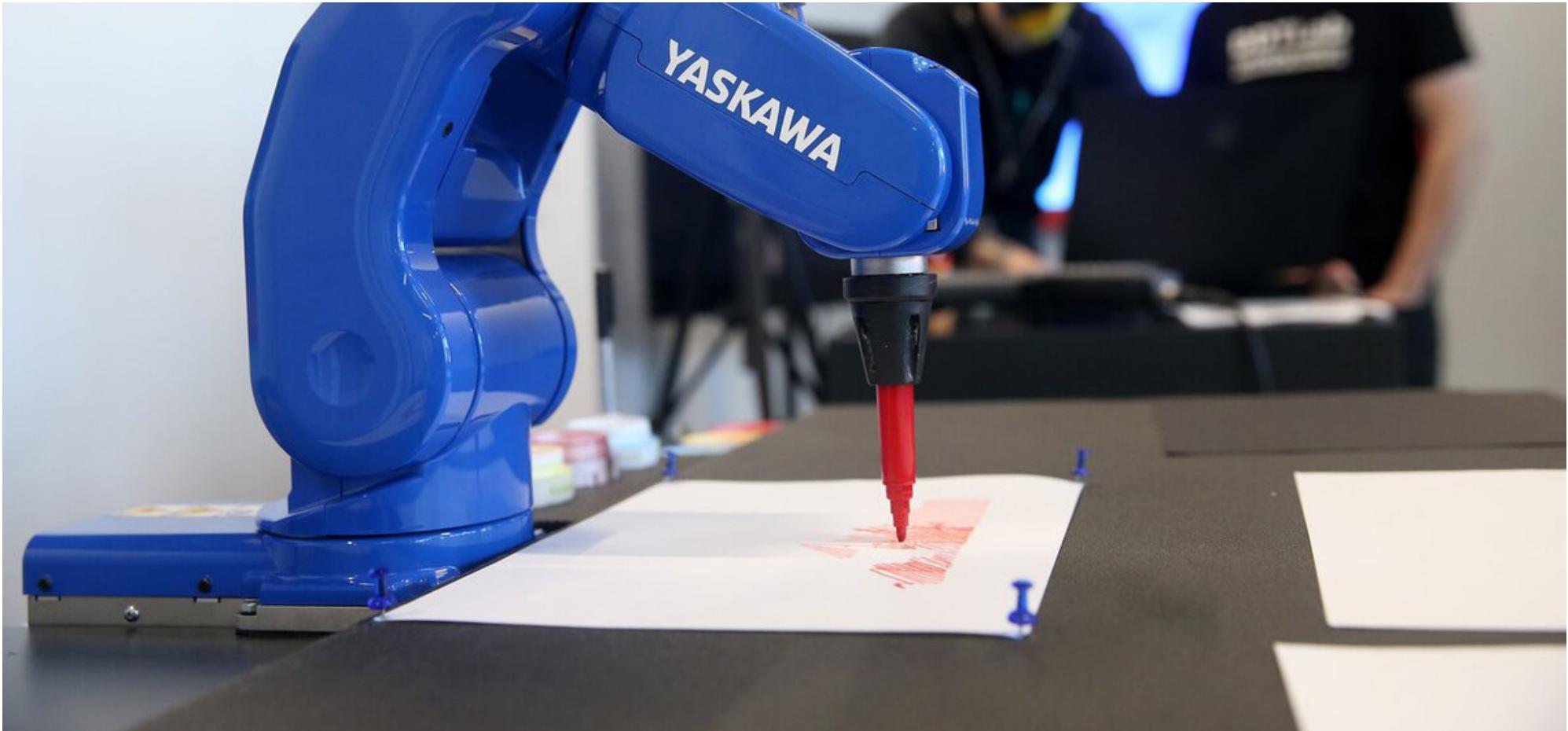
Ime projekta se navezuje na sodobni fenomen iz popularne kulture, ki je zaznamoval generacijo 90. let, katere mladina je bila zadnja, ki je doživelva pred-internetno dobo in obdobje pred prihodom družabnih omrežij, ter opozarja na to, kaj prihaja kot fenomen post-internetnega sveta. V tem svetu duhovi ne pripadajo zapuščenim starim hišam, ampak izhajajo iz naših lastnih digitalnih sledi. Vsi smo tujci, katerih duhovi tavajo po svetu podatkov, ki mu dajemo moč. Bolje ko poznamo svojo moč, kako vplivati nanj, boljši borci za prihodnost smo. Avtorji: Barbara Jazbec, Kristina Tica / Programiranje: Žan Rajšek / Zvok: Marija Šumarac

POWER STRANGERS is an interactive real-time video and audio installation. It consists of a web camera, projector and a water tank filled with reactive slime. It is based on custom-made face detection algorithm. When approaching the installation, the spectator's face is traced by a live camera feed. The data received from the camera is processed and projected inside the tank, only when the spectator turns away from the installation, and they are therefore never able to see the projection of their face.

These traced images then lurk behind the spectators, disconnected from them, yet dependent on them - becoming their ghosts. Contemporary ghosts live in the digital data and they generate the power of the automated surveillance systems. Extracting the disembodied virtual presence from its real-life experience, introduces the idea of being haunted by your own ghost - your own digital data. In the context of hauntology and retro-futurism, it aims at presenting the current state of commodification in global surveillance capitalism.

The name of the project is a reference to a pop-culture phenomenon that has left an imprint on the 90's generations, whose youth seems to be the last one to grasp the pre-internet or pre-social media times, therefore the aim of this project is to suggest what comes as a phenomenon of the post-internet world. In this world, the ghosts that exist do not come from a haunted house, they come from our own digital traces. We are all strangers whose ghosts roam around in the world of data, and we generate the power of that world. The more we learn about our power to influence this world, the better rangers for the future we are. Authors: Barbara Jazbec, Kristina Tica / Programming: Žan Rajšek / Sound: Marija Šumarac

## Mar Canet (ES), Varvara Guljajeva (EE) - Risalni avtomat / Drawing automata



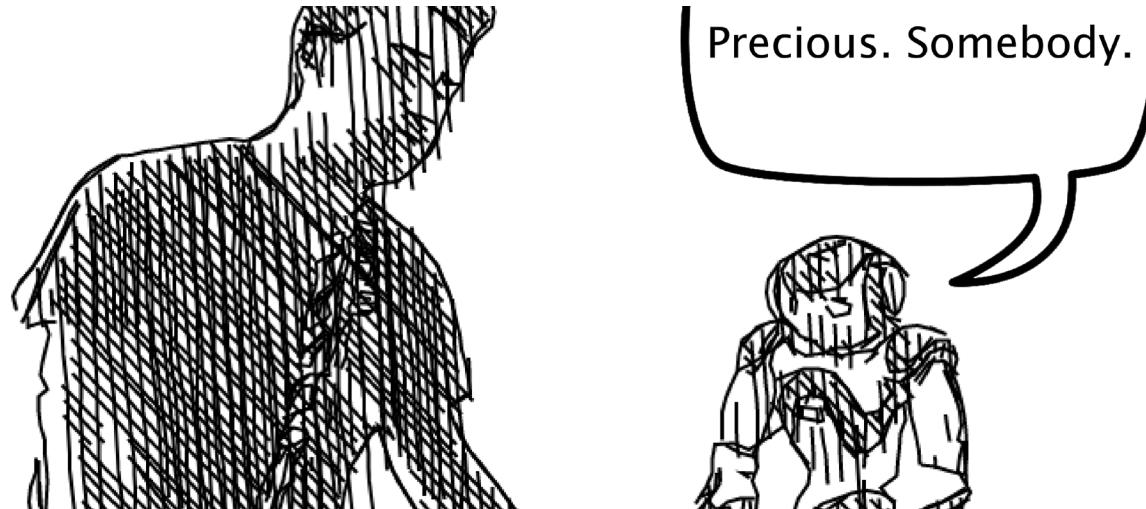
Risalni avtomat je robotska umetniška instalacija, ki ustvarja skice in risbe ljudi. Vrsta robotske roke, ki se uporablja v instalaciji, se običajno uporablja v industrijski proizvodnji, medtem ko jo tukaj želimo osvoboditi in ji dodeliti umetniško nalogu.

Ta interaktivna namestitev uporablja knjižnico Python Linedraw za pretvorbo slike spletne kamere v risbo, ki jo skicira robotska roka. Čeprav so vsi procesi algoritmični, se zdi, da je rezultat ročno narisana slika.

Drawing automata is a robotic art installation that creates sketches and drawings of people. The type of robotic arm seen in the installation is normally used in industrial production, while this project wants to liberate it, assigning it an artistic task.

This interactive installation uses the Python Linedraw Library to transforms a webcam image into a drawing, sketched by the robotic arm. Although all the processes behind it are algorithmic, the result seems hand-drawn.

## Mar Canet (ES), Varvara Guljajeva (EE) - Jaz, človek in EVA / I, Human and EVA



Nesporazumi med človekom in robotom: gre za interaktivno umetniško instalacijo, ki je nastala v času našega gostovanja v Laboratoriju DDTLab v Trbovljah. Projekt z rabi robotov, umetne inteligence in sodelovanjem občinstva ustvarja stripe, ki so skupni izdelek človeka in robota. Medtem ko se človek pogovarja z enim od robotov in se z njim fotografira, druga robotska roka v realnem času na papir izriše strip. Združevanje komunikacije, podob in besed skupaj ustvari vizualno zgodbo, h kateri doprinašata tako človek kot stroj.

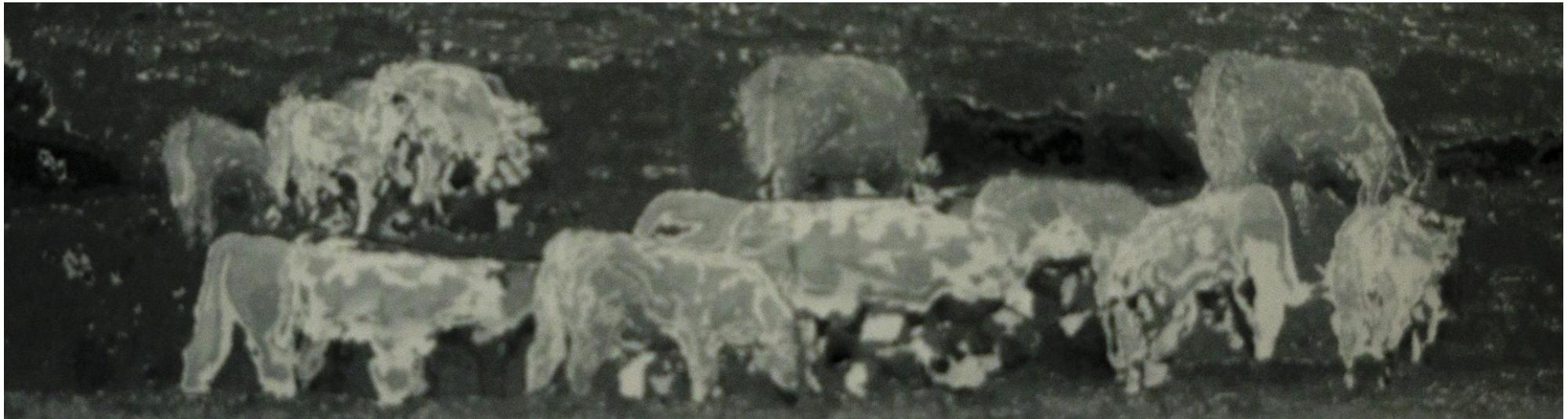
Veliko se govori o izboljšanju strojne inteligence in njenih ustvarjalnih sposobnosti. Kaj se zgodi, ko robot postane naš partner v pogovoru? Kakšne zgodbe in odnosi lahko vzniknejo iz takšnega scenarija? Naše besede želimo nadgraditi z vključevanjem podob in sodelovanjem občinstva, zato smo si zastavili tehnični izzik v podobi stripa in hkrati upravliali z dvema robotoma. Eden od njiju je služil kot partner v pogovoru, drugi pa kot pisec zgodb. Komunikacija se začne tako, da človek napiše besedilo in tako začne pogovor z EVO. Nato lahko ustvari vizualne slike za svoj strip in sliši robotov odgovor na vpisano besedilo. Namestiti se mora zraven humanoidnega NAO robota EVE. EVE odgovori in ko je posnetna še fotografija, je strip končan. Robotska roka Yaskawa zdaj začne risati zgodbo, ki kot klasični stripi združuje besedilo in sliko.

Kot umetnike nas bolj zanimajo sintetični odnosi med ljudmi in roboti ter romani, ki govorijo o takih odnosih. Poleg interakcije med človekom in računalnikom in ustvarjalne robotike, želimo raziskati tudi nove oblike jezika, vključno z vizualno.

*Comic Misunderstandings: Robots and Humans* is an interactive art installation developed while in residency at the DDT Lab RUK in Trbovlje. The project uses several robots, audience interaction and participation, as well as AI, in order to create collaborative comics between a human and a robot. While talking to one robot and taking a photo with it, another robotic arm draws a comic strip on paper in real-time. We combine interaction, image and word in order to create a participative visual storyline, which involves human and machine inputs.

Much has been said about the considerable improvement of machine intelligence and its creative abilities. What happens if a robot becomes our conversation partner? What kind of stories and relationships could emerge from such a scenario? Our aim is to go beyond words and also apply image and audience interaction. Therefore, we challenged ourselves technically with the format of comics, and operated two different robots at the same time: one as a conversation partner and another as a story writer. When it comes to the interaction flow, the participant writes a text to start a conversation with EVE. He or she can then create the visuals for his/her comic strip and also hear the robot's reply to the inserted text. To do that, one takes place next to the humanoid robot EVE (a NAO robot). EVE replies in voice and then a photo is taken. Now, when the comic strip is completed, another robot, Yaskawa robot arm, starts to draw up the story: text and image together, like in a traditional comic book.

As artists, we are more interested in the synthetic relations between humans and robots, and also novel publications that talk about such relationships. The aim is to explore in addition to HCI and creative robotics, also new forms of language including the visual one.



Svetloba sledi dihu. Pade noč, udari strela. Opoldanski ptiči pojejo naprej. Ti dnevniški zapisi o fenomenologiji opazovanja in čakanja s podobami pišejo po ekranu z elektronskim črnilom. Posneti v času, ko je bil pisec zaprt v Vendéeju in Parizu v Franciji, prečkajo izkustveni svet takojšnjega občutenja in odmaknjeno kraljestvo tihega premišljevanja. Namen tablic, na katerih so razstavljene slike, je posnemati občutje in odsevnost papirja in črnila. Gledalci srečajo te ekrane, ki je vdihnen nov namen, kot bi naleteli na že odprt dnevnik in se ne bi mogli upreti, da ne pokukajo vanj.

Podobe, ki jih ustvarjajo elektronsko koreografirane točke črnila, niso niti čisti vtisi, zapisani v pripovedovalčev um in preliti na papir, niti popolnoma domišljiji izmisleki ali odkloni tehnik. Vizualne podobe tečejo v ritmu misli in jezika. Pri podobi se ustavimo dovolj dolgo, da spregovori in se premakne naprej. Slike in besedilo preskakujejo. Nasprotno je dolgi tok zvoka obremenilen. Vleče s težo sedanjosti, objektivnosti in nenavezanosti. Dihanje, ki ga slišimo, pripada spečemu, nezavedno je in težko. To brnenje je meditativno in ker je časovno odrezano od podobe, se ob njem počutimo krhke. Neprekinitno minevanje trenutkov prekinjajo, motijo in lomijo le misli in spomini. Mitološke in literarne reference odvračajo pozornost od sedanjosti in jo pomagajo razložiti. Pisec se želi znova povezati s svetom ljudi in stvari, toda njegovo hrepenenje in tekstualizacija mu preprečujeta, da bi ga izkusil z dotikom, vidom in sluhom. Prav toliko kot z očmi ga vidi tudi skozi podobe.

Light follows the breath. Night falls, lighting strikes. The midday birds continue. These diaristic reflections on the phenomenology of watching and waiting write with images through an electronic ink screen. Filmed over a period of confinement in Vendée and Paris, France, they straddle an experiential world of immediate sensation, and a detached realm of quiet reflection. The tablets that display the picture are meant to replicate the feel and reflectivity of paper and ink. Spectators encounter these repurposed screens as if they were stumbling upon an already opened diary and could not help but peer inside.

The images created by electronically choreographed points of ink are neither pure impressions as remembered by the mind of the narrator and committed to paper, nor are they completely imaginary fabrications or aberrations of technology. The visuals flow to the rhythms of thought and language. We pause on an image long enough for it to speak and move on. Pictures and text leapfrog. The long flow of sound is heavy by contrast. It pulls with the weight of the present, objective and detached. The breaths heard are that of a sleeper, unconscious and brute. This drone is meditative in its ambience and its temporal disconnection from the images makes us feel delicate. This forward march of moments is punctuated, interrupted and fractured by thoughts and memories. Mythological and literary references distract from this present and help interpret it. The writer wants to reconnect with the world of people and things. Yet his desire for it, his textualizing of it, prevents him from experiencing it through touch, sight, and sound. He sees through images as much as his eyes.

## Qian Xu (CN) - Moj vrt / Private Garden

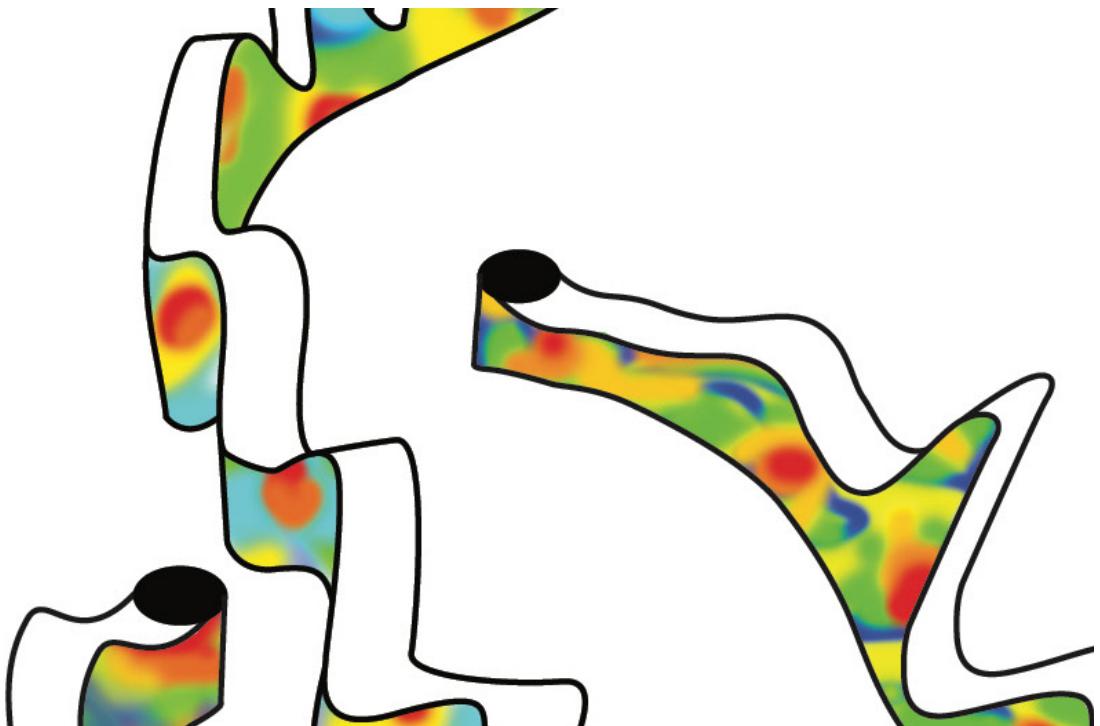
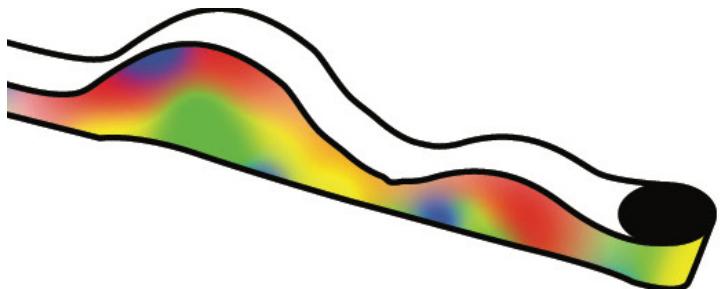


Moj vrt je interaktivna instalacija, ki projicira ustvarjene in obdelane vizualne podobe vrta na površino postelje. Obiskovalci se lahko zleknejo na posteljo in z gibi telesa komunicirajo s projekcijo in zvoki okolice ter tako doživijo intimno in mimetično izkušnjo pohajkovanja in počitka v lastnem vrtu. Pandemija je v letu 2020 močno spremenila naše vsakodnevno življenje. Umetnica je vse več časa preživiljala doma, v postelji, in kmalu opazila, da se to ne dogaja samo njej, ampak tudi opaznemu številu drugih ljudi. Postelja je tako postala intimen prostor za najrazličnejše početje, med drugim tudi za počitek in okrevanje od stresa, ki ga povzroča kaotično stanje v svetu.

Od tod se je porodila primerjava med posteljo in vrtom, ki nudita duhovno zdravljenje, in zamisel o nastanku projekta Moj lastni vrt. Med pripravo le-tega smo zgradili podatkovno slikovno bazo kitajskih vrtov. Tako nastanejo slike umetnih vrtov, ki jim s programom OpenFrameworks dodamo vizualne učinke. Med razstavo projiciramo nastale podobe na belo posteljo. Obiskovalci lahko splezajo na posteljo in s premikanjem svojega telesa komunicirajo s projekcijo. Zaznani položaj služi za vnos podatkov v generativni algoritem in spremeni projekcijo in zvočno okolje, ki tvorita obiskovalčevo interaktivno izkušnjo. Cilj projekta je ustvariti intimno okolje, kjer se obiskovalci lahko sprostijo, svobodno pretegnejo ter prepustijo sproščajoči izkušnji, medtem ko komunicirajo z nenehno spremenjajočim se umetnim vrtom.

Private Garden is an interactive installation which projects generated and processed garden visuals onto the surface of a bed. Visitors can hop onto the bed and interact with the visual projection and ambient sound using their body movements, thus having an intimate and mimicry experience of wandering and resting in one's private garden. In 2020, the pandemic has greatly changed our daily life. While the artist spent more and more time at home, and therefore in bed, she noticed that it wasn't happening to her alone, but rather to a noticeably rising number of people. The bed has become an intimate and versatile place to do a lot of things, including getting rest and recovering from the mental stress caused by the chaotic situation.

Therefore, she found the resemblance between bed and garden in the aspect of spiritual healing and formed the idea of Private Garden. During preparation, an image database of classical Chinese gardens is constructed. Images of artificial gardens can be generated, on which further visual effects are applied using OpenFrameworks. During the exhibition of the installation, the resulting images are projected onto a white bed. The visitor can climb onto the bed and interact with the projection by moving his/her body. The detected pose serves as the input data to the generative algorithm and alters the projection and the ambient sound environment, which forms an interactive experience for the visitor. The goal of the project is to create an immersive yet intimate environment, in which visitors can stretch their bodies freely and have a relaxing experience interacting with the ever-changing artificial garden.



Obiskovalci v projektu sodelujejo tako, da si nadenejo napravo MOODY®, ki meri stopnjo njihovega razburjenja ter razdaljo med njimi. Sponka na ušesu nenehno meri temperaturo, majhna led lučka pa z modro barvo prikazuje nizko, z rdečo pa visoko stopnjo razburjenja.

Na podlagi podatkov o razburjenju in razdalji med ljudmi, ki so poslani v server, bomo razvili algoritme za vizualizacijo in spodbujanje »Energij med ljudmi«. Med razstavo se lahko pridružite delavnici, kjer bomo izdelovali naprave, nadgrajevali in preizkušali algoritme ter utelešali dragulj med interakcijo z drugimi.

Vabimo vas tudi, da v priročnik za naprave dodate svoje teme in razpravljate o uporabniški politiki. Svet, kjer se zdi, da vse maske odpadejo, in kjer se začnemo zavedati medsebojne družbenе povezanosti. Ko nas naredi bolj »občutljive«, lahko prebije led in spremeni socialne konstrukte.

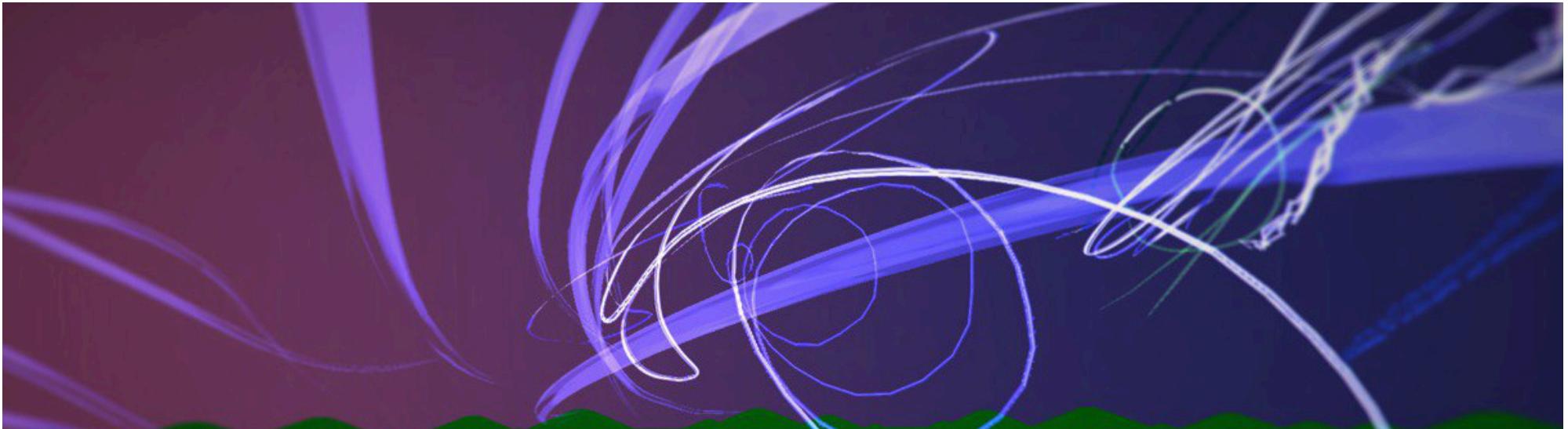
People participate by wearing a device (MOODY®) that measures their excitement-level together with the distances between them. A clip on the ear measures the temperature constantly while a small light (rgb-led) shows the color/ level of excitement. The scale goes from blue (low excitement) to red (high excitement).

All data is sent to a server. With the data of the excitements and mutual distances of the people, we will develop algorithms to visualize and even stimulate the 'Energies among People'.

During the expo you can join a workshop where we will build devices, upgrade and test algorithms and embody the jewel while interacting with others.

You are also invited to add topics to the device-manual and discuss the user-politics. A world where everyone's mask seems to fall off and where social interconnectivity is made aware. It can break the ice and change social constructions by making everybody more 'sensitive'.

## Vasily Kuzmich (UA) - Dih vetra / Breath of Wind



Dih vetra je meditativna avdio instalacija, ki združuje zvoke burje, glasbo in meditacijske tehnike, kot je dihanje. Instalacija, ki korenini tako v znanosti kot duhovnosti in filozofiji, predstavlja glasbo, ki nastane iz pretvorjenih zapisov vetra.

Z glasbeno terapijo frekvence pridobijo pozitiven učinek, obiskovalci pa si z meditativnimi dihalnimi tehnikami izboljšajo počutje. Pri raziskovanju tako lokalnega pojava, kot je burja, ki je silovita in nepredvidljiva, sem moral poleg posnetkov vetra kot takega uporabiti tudi matematiko, da sem lahko realne zapise kolikor je le mogoče natančno pretvoril v digitalne in uvel dejansko frekvenco vetra. Na podlagi korelacijskega razmerja med hitrostjo vetra in frekvenco hrupa sem izpeljal matematično formulo, ki mi je omogočila pridobiti note in tako sestaviti celotno kompozicijo.

Glasbena terapija ni le neka zdravilna frekvenca, ki pozitivno vpliva na možgane. Gre za v celoti subjektiven pristop, ki je odvisen od okusa in življenjskih izkušenj posameznika. Da bi dosegli čim boljši terapevtski učinek, je vsa glasba, uporabljena v projektu Dih vetra, posnetna z glasbili, ki so človeškemu ušesu najpogosteje kar se da prijetna. Vse to obiskovalcu pomaga, da se zatopi v sproščeno meditativno stanje. Glavni cilj instalacije je ljudem pomagati do dobrega počutja in jih spodbuditi, da izboljšajo svoje duševno zdravje z meditacijo, duhovnostjo, umetnostjo in podobnimi praksami.

Breath of the Wind is a meditative audio installation based on the Bora wind, music, and meditation techniques such as breathing. Sharing common roots in science, spirituality and philosophy, the installation contains music converted from wind data.

With the help of music therapy, frequencies have a positive effect, and through a meditative breathing technique, a person will breathe, improving their condition. Researching such a local phenomenon as the Bora wind (slov. burja), with a particular focus on its powerful and unpredictable character, I had to depend not only on the recording of the wind itself but also on mathematics to translate it as accurately as possible from the real into the digital and catch its exact frequency. With the help of the correlation ratio of wind speed to frequency, a mathematical formula was derived from the dependence of the wind noise frequency on wind speed to get a note and thus collect the entire composition.

Musical therapy is not just some kind of healing frequency that positively affects the brain. It is a completely subjective approach, depending on the taste and life experience of the individual. To get as close as possible to the therapeutic effect, the music in »Breath of the Wind« was made entirely with instruments that are most often pleasing to the human ear. All this helps to immerse the visitor in a relaxed, meditative state. The ultimate aim of the installation is to help people feel better and get inspiration to improve their mental health through meditation, spirituality, art or other practices.



Umetniško delo raziskuje fenomen dvojnosti biološkega in digitalnega telesa, sprejemanje in razumevanje, kaj je resnično telo, tako da digitalizira njegove gibe. Digitalno telo pridobimo in ustvarimo, vsakič ko vstopimo na internet ali v virtualno resničnost.

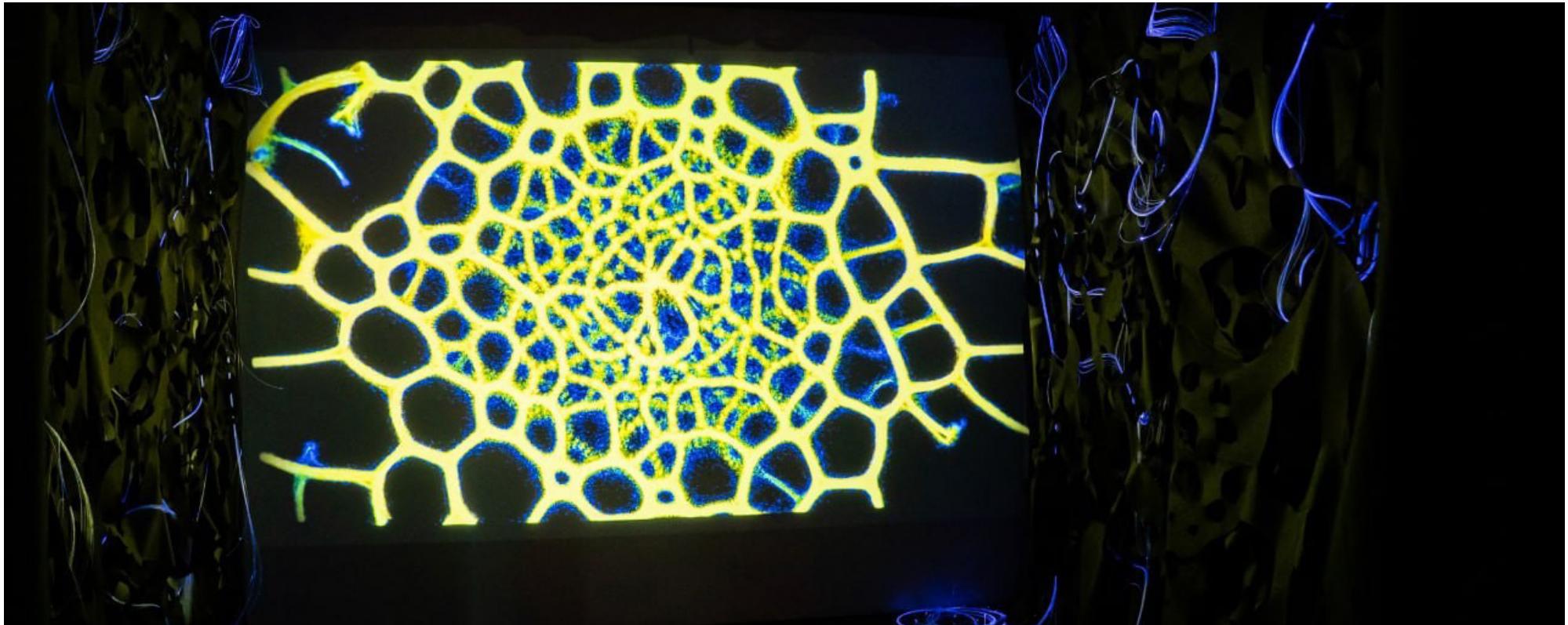
Vsebina, ki jo goltamo, postane naša hrana, naša dejanja pa naše meje. In medtem ko vznika diskurz, ki slavi lepoto katerega koli telesa, se osredotočamo predvsem na korponerealnost, ne da bi upoštevali digitalne sledi novega telesa, ki nam pripada. Istočasno posvečamo fizičnemu telesu več pozitivne pozornosti kot kadar koli prej. Opažamo, da poseduje edinstveno fluidnost, ki jo lahko spremljamo v virtualnem prostoru. Takšne sledi so kot znamenja; tujcem so nevidna, prodirajo v kožo od znotraj in od zunaj, hkrati pa poskušajo raziskati in pojasniti naravo biološke strukture, ki nas dela ljudi. V video performansi medijski arheološki artefakti razkrivajo nevidno mrežo, v katero se z vsakim dejanjem vse bolj zapleta telo.

Korpo(ne)realnost želi obiskovalca seznaniti s telesi, jih globoko in nežno razumeti ter jih na koncu sprejeti v vseh njihovih stanjih. Umetniško delo je sestavljeno iz dveh delov, in sicer iz video-performansa ter interaktivne instalacije z VR očali. Video priповедuje zgodbo o sprejemanju, strahovih in navdušenju ob tekočem prehodu iz digitalnega v biološko telo in obratno. V drugem delu lahko obiskovalci pustijo lastnega telesa v skupnem virtualnem prostoru, napolnjenim s postavami, ki so jih tam pustili prejšnji obiskovalci, in tistimi, ki jih je vnaprej pripravila umetnica.

The artwork explores a phenomenon of duality of a biological and a digital body, acceptance and understanding, what a real body is, through digitalizing it by making movements. Digital body is what we gain and grow each time we enter the Internet or VR.

The content we consume becomes a nutrient, and the actions we make become our borders. And while there is an emerging discourse in praise of beauty for any body, we focus mostly on corporeality, not considering digital traces of a new body we own. At the same time, the physical body receives more positive attention than ever, we notice that it possesses a unique fluidity that can actually be traced in virtual space. Such traces are like marks, invisible to strangers, penetrate the skin in and out, yet trying to explore and explain the nature of biological structure that forms us as humans. In the video performance, media archaeology artefacts reveal an invisible network in which a body is being tied more and more with each action.

Corporealreality is aimed to make a visitor get acquainted with bodies, understand them deep and tenderly, and in the end, accept them in all of their states. Second part, the visitors are welcomed to leave the trace of their own body in a common virtual space filled with figures of previous participants and ones prepared by the artist. The artwork consists of two parts: a video performance and an interactive installation with a VR headset. The video tells a story of acceptance, fears and excitement at the flowing shift from the digital body to the biological one, back and forth. In the second part, the visitors are welcomed to leave the trace of their own body in a common virtual space filled with figures of previous participants and the ones prepared by the artist.



Cyberrhiza je spoj kibernetske mychorize, ki izvira iz grških besed κυβερνάω (usmerjati, krmrati ali upravljati) in βίζα (korenine). Besedo cyberrhiza lahko torej prevedemo kot »usmerjanje korenin«. Odraža tako njihove vedenjske značilnosti kot njihovo temeljno vlogo v možni prihodnosti.

Cyberrhiza služi kot temelj za prihodnji svet, saj tvori njegovo vselej navzočo simbiotsko informacijsko mrežo. Združuje biološko in tehnološko področje, ki se prepletata in usklajujeta v noosferski integriteti. Cyberrhiza je tisto, kar nas vodi v prihodnosti, saj iz njenih brezkončnih heterogenih povezav vznika kolektivna inteligenco, ki nas navdušeno vodi. Njen namen nista moč in rast, ampak spetno ustvarjanje potencialov za sobivanje.

Cyberrhiza je odprta za povezovanje in komunikacijo, toda ali boste lahko sprejeli njena sporočila?

Cyberrhiza is an amalgamation of cybernetic mycorrhiza, which comes from greek words κυβερνάω (to steer, navigate or govern), and βίζα (roots). So cyberrhiza translates as navigating roots. It reflects both their behavioral traits and their ground role in the possible future.

Cyberrhiza is what serves as a foundation for the future world, as it constitutes its ever present symbiotic informational network. It unites biological and technological realms, intertwining and reconciling in noospheric integrity. Cyberrhiza is what navigates us in the future, as out of its infinite heterogeneous connections emerges a collective intelligence that keenly guides us. Its intention is not power and growth — but artful creation of potentials for coexistence.

Cyberrhiza is open for connection and communication. But will you be able to accept its messages?



Inteligenca rastlin je ena od stopenj večdelnega projekta Zaznava rastlin. Projekt je še v teku, lahko pa ga vidite v digitalni obliki. Delo se osredotoča na ustvarjanju čustvenih vezi med človekom in rastlino preko virtualnega vmesnika z namenom spremeniti naš odnos do rastlin in povečati zavedanje o svetu flore.

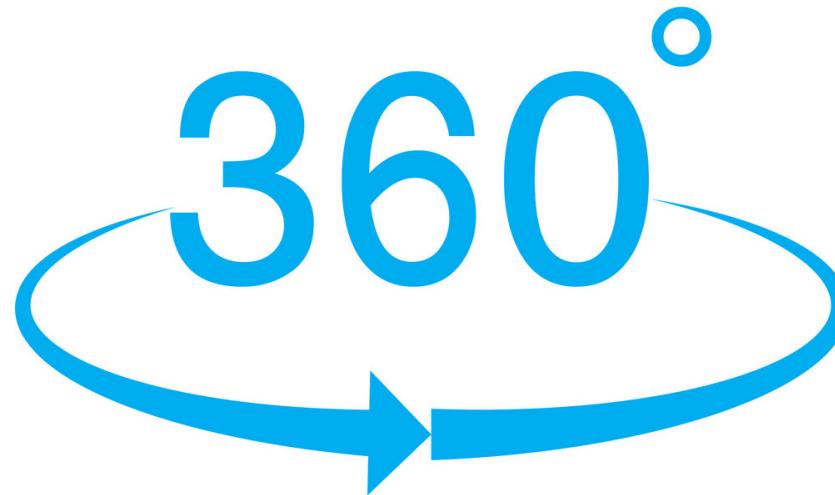
Da bi vzpostavili to čustveno povezanost, spremenimo videz vmesnika rastline – njen avatar, in mu nadanemo človeško podobo. Naša instalacija je igralni avtomat. Gledalce bi radi potopili v poznavanje rastlinskega sveta.

Tehnologija postaja eno od orodij za razumevanje ne-človeških predstavnikov in za raziskovanje komunikacije med dvema življenskima vrstama – rastlinami in ljudmi.

Plant Intelligence is one of the stages of the multipart project Plant Perception. The work is still in progress and you can see its digital version. This project is about forming an emotional connection between a person and a plant through a virtual agent, in order to change the attitude towards plants and raise awareness of the world of flora.

To create this emotional connection, we are changing the appearance of the plant's mediator — the avatar, giving it an anthropomorphic shape. Our installation is a gaming machine. We would like to immerse the viewers in the knowledge of the world of plants.

Technology is becoming one of the tools for understanding non-human agents and researching the topic of interspecies communication between plants and humans.



Mednarodni festival DigitalBigScreen se letos predstavlja že v enajsti ediciji. Pred tremi leti smo v okviru tega festivala, na osnovi natečaja, prvič predstavili videe 360. Od takrat naprej vsako leto povabimo umetnice in umetnike, ki se ukvarjajo z videom 360° oziroma z virtualno resničnostjo. Predstavljajo se domači in tuji umetniki, ki svoje ustvarjanje na področju videa nadgrajujejo z inovativnimi tehnologijami.

Nova tehnologija omogoča ne le gledanje videa, temveč tudi interakcijski odnos med gledalcem in videom, da gledalec nekako postane del videa. Posebni gostje festivala so mednarodna skupina EN-KNAP, ki jo je leta 1993 pod okriljem festivala Klapstuk, v belgijskem Leuvenu, ustanovil Trboveljski koreograf Iztok Kovač. Predstavili se bodo z novim projektom Oder360, kjer vam bodo preko VR očal predstavili odlomke predstav, kjer ste vi kot gledalec iz sedeža v auditoriu pomaknjeni na sredino odra, v središče plesnega dogajanja. Na mednarodni natečaj za video 360° se je prijavilo devet avtorjev iz vsega sveta, z desetimi video deli, ki posegajo na področja animacije, dokumentarnega filma in umetniškega videa.

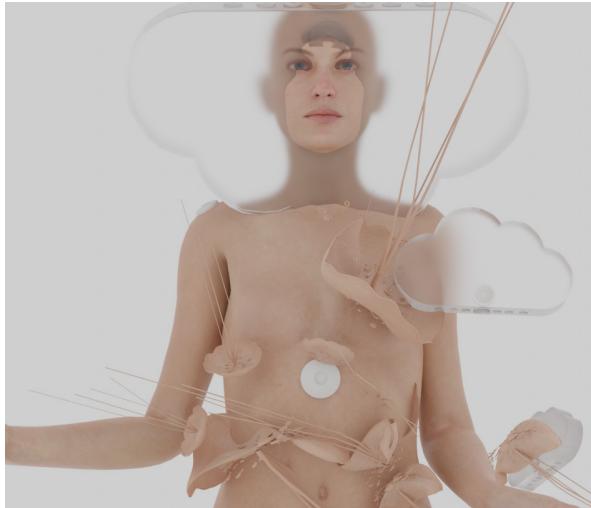
Strokovna žirija v sestavi Andreja Uduča in Barbare Jazbec je izbrala pet avtorjev. Njihova dela so na ogled v času trajanja festivala z očali za virtualno resničnost. Kljub razmeram v katerih trenutno živimo, ostajamo kreativni in še naprej odpiramo nova poglavja, iščemo nova obzorja in sledimo novim trendom v tehnologiji.

Welcome to the 11th edition of the The DigitalBigScreen International Festival. Ever since we first launched a 360° video contest three years ago, we have been inviting domestic and foreign artists, who work with 360° video or virtual reality and upgrade their creations with innovative technologies, to participate in the festival.

New technologies not only simplify video viewing, but also facilitate the formation of an interactive relationship with the viewers, who thus become a part of the video. This year's special guests are the international EN-KNAP Group, which was founded in 1993, by the Trbovlje choreographer, Iztok Kovač, under the auspices of the Klapstuk festival in Leuven, Belgium. The group will present their new project Stage360, which features excerpts from their performances. With the help of the VR headset, they will take us on a journey, where the spectator is brought from his seat in the auditorium into the middle of the stage and into the heart of the event itself. This year, nine artists from all over the world entered our international 360° video contest with ten different projects in the fields of animation, documentary, and art video.

The jury consisting of Andrej Uduč and Barbara Jazbec selected five of them. Their works can be seen with a VR headset during the festival. Despite the current situation in the world, the creators of the festival remain creative and continue to open new chapters, seek new horizons, and follow new trends in technology.

## DigitalBigScreen Zmagovalci natečaja / Open call winners



Prvo mesto / first place :  
Sandrine Deumier (FR) - Delta

»Če je vse povezano, je vse ranljivo.«

Ta projekt preizkuša raziskati oziroma predvideti proces tehnološkega čarovništva. Zzamisljotehnologijev prihodnosti se osredotoča na fenomen empatije in medsebojne povezave med rasami. Tehnologija prihodnosti predlaga nov izum zavesti in strategij za prilaščanje animističnih domišljij.

»If everything is connected, everything is vulnerable.«

This project attempts to explore / anticipate processes of technological witchcraft.

»By imagining future technological tools centered on phenomena of empathy and interconnections between species, it proposes to invent forms of multi-consciousness and strategies for reappropriating animist imaginaries.«



Drugo mesto / second place:  
Yu-Hsuan Yao (TW) - Guan Luo Yin Seance

Nebo je jasno in zemlja je polna duhovne energije, z vami tremi se pogajam, tri velike tete, za odgovor. Guan Luo Yin je prepoznavni stavek taoističnega obreda iz Tajvana. Nekateri pripovedujejo, da lahko s tem obredom prikličejo duše umrlih. Projekt Guan Luo Yin Seance je proces, ki poskuša najti razmerje med racionalnostjo in duhovnostjo.

The sky is clear and the earth is full of spiritual energy, I plead with you three great grand aunts for inquiry. Guan Luo Yin is a popular seance ritual of Taoism in Taiwan, some claim they can reach out to the dead or spirits through the trip.

Project Guan Luo Yin Seance is an attempt to find the equation between rationality and spirituality.



Tretje mesto / third place :  
Teuta Pashnjari (AL)  
JAZ SEM DOMA / I AM HOME

»JAZ SEM DOMA je performans, ki se osredotoča na mojo močno povezavo z Albanijo, Grčijo, Nemčijo in Finsko.«

V tej video dokumentaciji performansa pišem 'jaz sem doma' v štirih različnih jezikih. S tem izražam, kako so te države vplivale na moje življenje.«

»I AM HOME is a performance piece that focuses on my strong connection to Albania, Greece, Germany and Finland.«

In this performance video, I write 'I am home' in four different languages stating the importance and personal influences these countries have had in my life.«



Fotosinteza jaz je bioartistična, interaktivna in imerzivna instalacija, ki vznika iz poskusa na temo »kako postati podobni rastlinam«. V projektu bioteknolog aktivira fotosintetski sistem v situaciji spremenjene evolucije, s katerim Vanessa V postane samozadostna, kar se tiče potreb po hrani in energiji, končno pa postane tudi proizvajalec energije. Ideja se je Vanessi porodila na njeni osebni poti, ko se je pred nekaj leti na testu izkazalo, da pri njej obstaja tveganje za dve genetski mutaciji, kar jo je spodbudilo, da se je začela zanimati za genetiko. Fotosinteza jaz deluje dvošerno: ljudi informira o novih genetskih tehnikah, njihovih omejitvah in njihovem vseobsegajočem vplivu na naše vsakdanje življenje ter hkrati spodbuja raziskovanje in iskanje novih tehnik in obnovljivih virov energije, povezanih z bioteknologijami. Instalacija je sestavljena iz treh okolij, ki segajo čez isto območje, na katerem rastejo alge. Obiskovalec se skozi utelešen pripovedni proces spremeni v protagonista.

A: Dokumentarni film, ki temelji na posebnih študijah fotosintezi lastnosti morskega polža *elysa chlorotica* in encima transpozaza, povezanega s CRISPR. Z raziskavami, ki se osredotočajo na ureditev genoma, sintetično biologijo in genske terapije in-vivo, bomo pripravili posebno lažno kremo, ki bo spremenila Vanessa V. v algo.

B: Gensko spremenjene alge, ki so sposobne povečati učinkovitost sončnih kolektorjev, omogočajo Vanessi proizvajati energijo.

C: Obiskovalec lahko leže v imerzivnem VR okolju in izkusi, kako je biti kot rastlina.

Photosynthetic Me is a bioart, interactive and Immersive installation that emerges from a process-based experiment around the topic of becoming plant-like. In the project, a biotechnologist activates a photosynthetic system in a situation of altered evolution that can make Vanessa V self-sufficient for food and energy requirements and, eventually, a producer of energy. The idea was born from Vanessa's personal path started a few years ago when she tested positive for the risk of two genetic mutations in light of which she decided to inquire into the debate around genetics. Photosynthetic me acts in two directions: to make people aware of new genetic techniques, their limits and their pervasive effect in our daily life; to push the research to find innovative renewable energy techniques related to biotechnologies. The installation consists of 3 environments that share the same area where algae grow. The visitor jumps from being an observer to being a protagonist through an embodied narrative process.

A. A documentary based on specific studies of the photosynthetic qualities of the *elysia chlorotica* slug and on CRISPR associated transposase. Through research focused on genome editing, synthetic biology, and in-vivo gene therapy, an innovative topical cream will be realized. This fake cream will transform Vanessa V into algae.

B. Genetically modified algae capable of increasing the efficiency of solar panels allow Vanessa to generate energy.

C. The visitor can lie down in an immersive VR experience becoming plant-like.



Doživite, kako je biti potopljen v reko in potovati s tokom po eni najlepših evropskih rek, smaragdno zeleni Soči, ki z lastno hitrostjo in ritmom teče skozi Triglavski narodni park. V globinah se upočasni, kroži v vrtincih in pospeši skozi plitke brzice. Posnetki z vodooodporno 360-stopinjsko kamero gledalcu razkrivajo edinstven pogled na to nenehno spremenljivo vodno pokrajino.

Projekt je nastal v času trajanja PIFcampa 2021 v dolini Trente. Navodila, kako narediti vodooodporno ohišje za kamero so prosti dostopni na spletu. Potopljeni v vodo, ne da bi nas zeblo ali nam primanjkovalo zraka, lahko raziskujemo in izkušamo neponovljive vodne vrtince, sence in vzorce zračnih mehurčkov, različne odtenke turkizno zelene in modre, skale in kamenčke, ki jih premika rečni tok. Moj VR film s svojim prefinjenim spoštovanjem delikatnega plesa narave črpa navdih iz žanra eko kina in poskuša ob pomoči novih tehnologij in medijev nadaljevati zapuščino filmov Andreja Zdravica (Skrivnosti Soče, 1995, in V steklu reke, 1997). Smaragdno zelena reka, ki teče skozi zahodno Slovenijo in severovzhodno Italijo, po 138 kilometrih prispe na končni cilj v Jadranskem morju.

Tudi v današnjem času je raznolikost te vodne krajine še vedno mogoče občudovati vse od nedotaknjenih gorskih narodnih parkov v zgornjem toku reke do antropogeno prizadetege in spremenjenega spodnjega toka, kjer nekatera območja reke služijo kot opozorilo, kako lahko živahna in energična reka zaradi človeške dejavnosti izgubi svojo vitalnost. Zadnji del videa je poetično potovanje skozi še nikoli video podvodno rečno pokrajino.

Experience the feeling of being submerged and flowing down with the stream of one of the most beautiful rivers in Europe, the emerald green Soča river. It flows through the Triglav National Park with its own pace and rhythm. It slows down in the depth, flows in circles in whirlpools and speeds through shallow rapids. With the help of a waterproof 360° camera the viewer gets a unique perspective of this ever changing aquatic landscape.

The project was realized during 2021 PifCamp in Trenta Valley. The instructions on how to build a waterproof housing are accessible online. Submerged under the water undisturbed from the lack of air or the coldness of the river we can explore and experience unique water swirls, shadows and air bubble patterns, different shades of turquoise blue and green, rocks and pebbles moving in the flow of the stream. With its subtle appreciation for the delicate visual dance of nature the VR film derives inspiration from the eco-cinema genre and tries to continue on the legacy of Andrej Zdravici's films (Secrets of Soča, 1995, and Riverglass, 1997), with the help of new technology and media. It takes 138 km for the emerald green river, that flows through the Western Slovenia and the Northeastern Italy, to reach its final destination in the Adriatic Sea.

Even in the present day, the diversity of this aquatic landscape can still be admired all the way from the pristine mountain national park protected regions in the upper stream of the river to the anthropogenically impacted and modified lower stream, where some areas of the river serve as a warning on how a lively and energetic river can lose its vitality as a result of human activity. The final part of the video is a poetic journey through the never-seen underwater river landscape.



Oder360, projekt Zavoda EN-KNAP, ki se spogleduje s prihodnostjo in raziskuje potenciale plesa v navidezni resničnosti, pomeni vzpostavitev novega tipa postprodukije v obliki virtualizacije predstav in posebnega (vodenega) ogleda predstav z VR očali, posnetih s 360° kamero. Iztok Kovač, koreograf in umetniški vodja Zavoda EN-KNAP, bo preko VR očal predstavil odломke predstav, kjer je gledalec iz sedeža v auditoriju pomaknjen na sredino odra, v središče plesnega dogajanja.

Prvotna faza projekta, ki je vključevala spoznavanje in testiranje tehnologije skupaj s strokovnjaki na področju novih tehnologij na konkretnih primerih, je pokazala, da predstave posnete s 360° kamerami, ambisoničnim zvokom in prilagojeno svetlobno podporo, gledalcu ponujajo popolnoma novo gledališko izkustvo, ga na drugačen način vežejo na vsebino predstave in razbijajo klasično gledališko formo, kjer je pogled usmerjen zgolj preko četrte odrske stene. Smer pogleda brez okvirja postane izbira posameznika, neposredna bližina nastopajočih pa privilegij, ki mu prej nismo bili priča.

Gre za popolnoma nov umetniški žanr, ki v časih negotovosti za umetnost in gledališče, predstavlja stik med preteklostjo in prihodnostjo ter svojevrstno ohranja svežino umetniških del, saj v publiku vzbuja novo radovednost.

Stage360 is a project by the EN-KNAP Institute that looks up to the future and explores the potentials of dance in virtual reality. It establishes a new type of post production, where the performance is virtualized, recorded with a 360° video camera and then available to the audience in a special (guided) screening with the VR headset. With the help of a VR headset, Iztok Kovač, choreographer and art director of the EN-KNAP Institute, takes us on a journey through several parts of the performance, where the spectator is brought from his seat in the auditorium into the middle of the stage and, thereby, into the heart of the event itself.

The initial phase of the project, which included real case study and testing the technology under guidance of the new-technology experts, showed that performances recorded with 360° cameras, ambisonic sound, and adapted light support, offer a completely new experience; they facilitate the spectator to connect with the performance in a different way, thereby breaking the classical theatrical form where the view is only directed over the fourth stage wall. A view without a frame becomes an individual choice and the proximity of the dancers a privilege we have not witnessed before.

In times of uncertainty for the performing arts and theatre, this creates a whole new artistic genre that establishes a connection between past and future, all the while preserving the freshness of works of art by arousing in the audience a certain new curiosity.

## Kompilacije študentskih del / Compilation of student works



### Predstavljeni projekti TAMK / Presented TAMK projects:

Elisa Serave - Rekla sem, da sem v redu / I said I'm Fine

Daria Craciun - Potovanje k ljubezni do sebe / A Journey of Self-love

Andreea Giotina, Daria Craciun, Gustavo Juber - Sedem minut v raju / 7 Minutes In Paradise

Saara Del Rio Rajanti, Gabriella Presnal, Naksu Kihlakaski - Zlomljena generacija / Generation Broken

Maxime Deseyne - Smehljala se bom / I'll smile

Eevi Siniketo - To je moja klapa / Meet The Gang

Yu-Hsuan Harjula - Od 9h do 5h do 4h /Ristimäentie / 9 To 5 Till 4 /Ristimäentie

Juulia Vanhatalo - Filter

Salla Kuoppamaa - Točka osredotočenja / Focus Point

Teini Piibemaa - Tesnoba #362 / Anxiety #362

Teini Piibemaa - Mi in naše / Us and Ours

Teuta Pashnjari - Odtujenost / Alienation

Teuta Pashnjari - Odtujenost (krajša verzija) / Alienation (second cut)

### Predstavljeni projekti Akademije Umetnosti Univerze v Novi Gorici / Presented works from Academy of Arts, University of Nova Gorica:

Katarina Blažič - Pet urni pogovor / Five hour conversation

Aljaž Lavrič, - Tišina / Silence

Anja Paternoster, - Bela, črna in prava ljubezen / White, black and true love

Milena Brkić, Karin Likar, Renee Stanič, Nikita Velichko, Maksimilian Zabukovec - Kako ne narediti dokumentarca / How not to make a documentary

Adriana Kostja Ronkali, Carolina Carqueja e Silveira, Filip Sluga, Tijana Mijušković, Vanda Ljumović - Piknik na pokopališču / Graveyard picnic

Boris T. Matić - Kvaliteten skupni čas / Quality time together

Ivana Kalc - Čas je fizikalna dimenzija / Time is a physical dimension

Ivana Kalc - Lazarus



Društvo slovenskega animiranega filma (DSAF) je stanovska organizacija, ki združuje avtorje, ustvarjalce in druge strokovnjake s področja animiranega filma z namenom zastopanja skupnih interesov v domačem in mednarodnem prostoru. Od ustanovitve leta 2011 izvajamo številne promocijske dejavnosti za splošno in strokovno občinstvo, gradimo dialog z javnimi institucijami in odločevalci, podeljujemo nacionalne stanovske nagrade na področju animiranega filma in prirejamo srečanja za naše člane. V domačem prostoru se povezujemo s sorodnimi organizacijami, od leta 2017 kot soustanovitelji in člani generalne skupščine Zveze društv slovenskih filmskih ustvarjalcev. Povezujemo se tudi v tujini: kot nosilci projektov v mednarodni iniciativi CEE Animation skrbimo za razvoj projektov in njihov dostop do mednarodnih trgov in izobraževalnih dogodkov, pri tem pa nas podpira tudi Evropska komisija.

Predvajane predstave za otroke:

Najlepši animirani filmi za otroke, 4+

Slovenski literarni junaki, 6+

Tegobe odraščanja, 11+

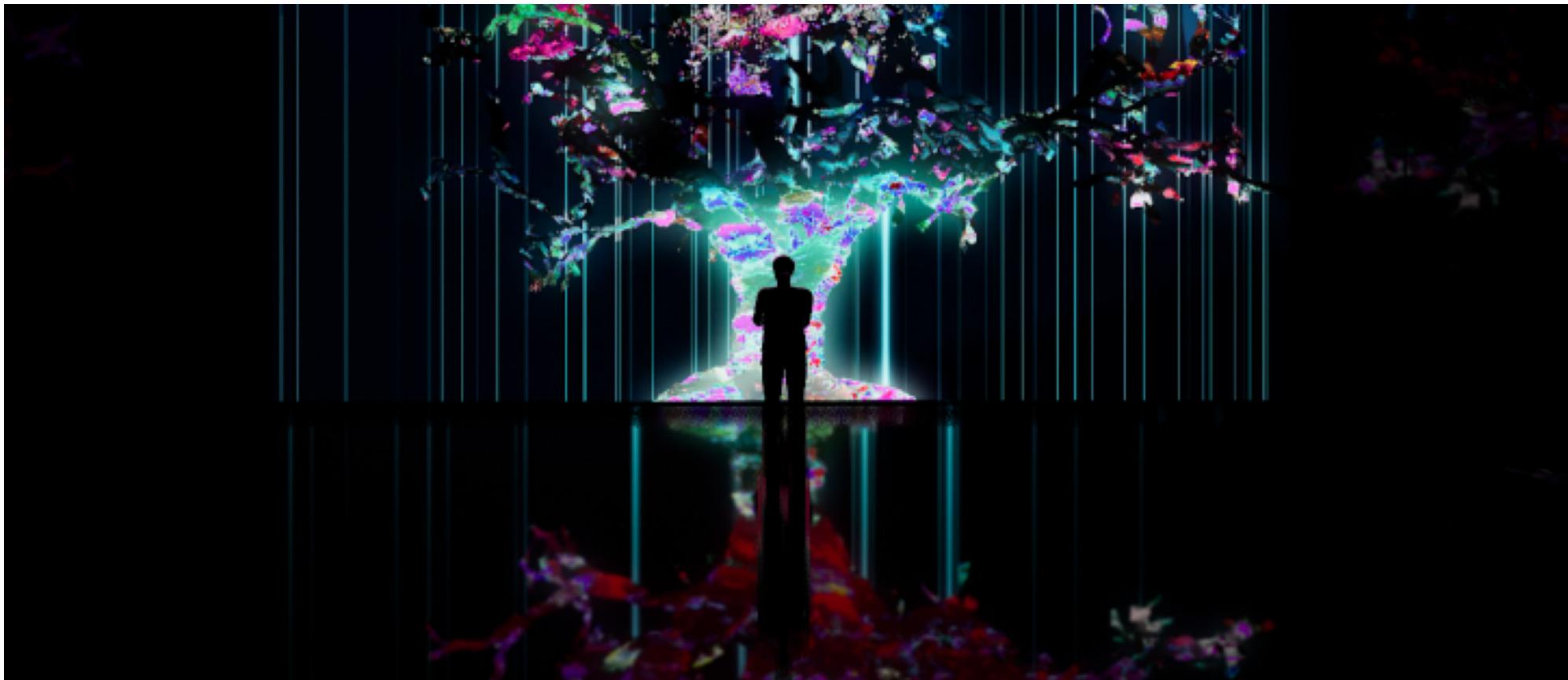
The Slovenian Animated Film Association (DSAF) is a professional organization that brings together authors, creators and other experts in the field of animated film in order to represent common interests in the domestic and international space. Since the establishment in 2011, we have carried out numerous promotional activities for general and professional audiences, built a dialogue with public institutions and decision-makers, awarded national professional awards in the field of animated film and organized meetings for our members. We have established connections with related organizations through Slovenia, and have acted as co-founders and members of the General Assembly of the Association of Slovenian Filmmakers since 2017. Outside Slovenia, we are supported by the European Commission to work as project coordinator in the international initiative CEE Animation, where we have developed several different projects and facilitated their entry into international markets and educational events.

Animated films for children:

Best animated films for children, 4+

Slovenian literary heroes, 6+

The difficulties of growing up, 11+



Airplant je avdio-vizualni performans, sestavljen iz elektronske glasbe in interaktivnih podob. Glasbenik Vahid Qaderi posname glasbo, ki temelji na dogodkih iz njegovega osebnega življenja ter njegovih vsakodnevnih srečanjih z zvoki mesta, narave in ljudi, pa tudi drugih ustvarjenih zvokih in glasbi, ki nas nenehno obkroža v našem vsakdanu.

Čeprav je glasba povsem digitalna, je vanjo vključenih veliko posnetih zvokov. Interaktivne podobe ustvarja Razieh Kooshki. Temeljijo na abstraktnih zgodbah, ki jih sliši v glasbi. Podobe so sestavljene iz obliskovanih in generativnih videoposnetkov, kot so 3D animacije ter digitalne in abstraktne slike, ki so medsebojno povezane z različnimi zvočnimi kanali.

Airplant is an audio-visual performance which consists of electronic music and interactive visuals. The musician, Vahid Qaderi, creates music based on his personal life events and his daily encounters with different sounds of the city, nature, and people, as well as other created sounds and music that constantly surround us in everyday life.

The music is completely digital but there are many recorded sounds that are being used. The interactive visuals are created by Razieh Kooshki based on the abstract story she receives from music. Visuals are combinations of designed and generative videos such as 3D animation, digital paintings and abstract pictures that interact with different channels of the sound.

## EnKnap (SI) - Odvečni / The Redundant



Izhodišče za nastanek predstave predstavlja esej *Odvečni človek, razmislek* pisatelja Ilike Trojanowa o uničujoči, rušilni sili kapitalizma, ki se v imenu dobička sistematizirano odreka tako človeku, kot človeštvu. Ko se v refleksijo vključi še aktualno epidemiološko stanje in restrikcije, so njegova vprašanja postala še toliko bolj aktualna: Kdo je odvečen in za koga? Kdo med nami je nepotreben? Ali sploh obstajamo, če ne proizvajamo ali ne trošimo? Kako tanka je meja med koristnim in nepotrebним?

Svoje raziskave, ideje in izzive drug drugemu so plesalci skupine EN-KNAP Group spomladi 2020 posneli v izolaciji kot serijo video posnetkov, ki so si jih dnevno izmenjevali ter redno objavljali na spletu. Po dveh mesecih izolacije so junija 2020 specifike individualnih materialov preselili nazaj v studio in jih kolektivno razvili v posamezne sekvence predstave *Odvečni*. Elementi predstave zajemajo tako serijo vnaprej pripravljenih, kot tudi nepredvidljivih sekvenc, katerih unikatno strukturo izvajalci vedno znova določajo pri vsaki izvedbi sproti. Od tod izvirajo različni podnaslovi, ki dodatno osmišljajo osnovno temo predstave.

Upororitev vsakokrat z avtorsko glasbo v živo dopolnjujeta in usmerjata še gostujoča glasbenika (Damir Avdić, Tomaž Grom ali Samo Kutin) in lučni oblikovalec (Jaka Šimenc ali Leon Curk), ki predstavljajo dodatno dramaturško linijo, nepredvidljiv izviv in vzpodbudo za plesalce skupine EN-KNAP Group.

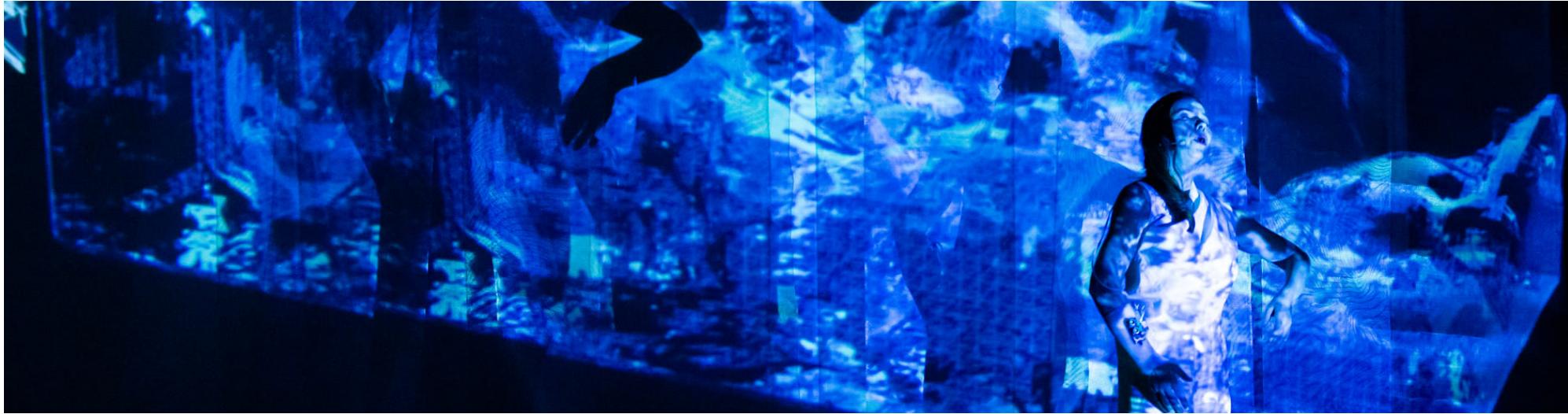
The performance is based on Ilija Trojanow's essay *The Superfluous Human*, in which the author takes a look at the devastating, destructive force of capitalism that, in the name of profit, systematically renounces humans as well as humanity. If we add the current epidemiological situation and all of its restrictions, his questions become all the more meaningful: Who is redundant and for whom? Who among us is unnecessary? If we do not produce or consume, do we even exist? What is the thin line between the useful and the unnecessary?

During the quarantine times in the spring of 2020, the dancers of the EN-KNAP Group recorded their research, ideals and challenges in the form of short videos. Daily, they exchanged the material amongst themselves and published it online. In June 2020, after two months of isolation, the specifics of their individual work were transferred into the studio and onto the dancefloor, where they further developed some of those sequences and created the above-mentioned performance. The elements of the show comprise a series of predictable and unpredictable sequences that are being rediscovered and restructured by the dancers during each performance. This gives rise to all the different subtitles, which further illuminate the fundamental theme of the performance.

Every staging is accompanied by a live performance of guest musicians (Damir Avdić, Tomaž Grom or Samo Kutin) and lighting artists (Jaka Šimenc or Leon Curk), who add their own dramaturgical line, which challenges as well as encourages all the dancers of the EN-KNAP Group.

# Jasna Hibernik, Ljuba Jenč, Borut Čelik, Zala Zia Lenardič, Tomaž Šimnovec (SI) - Komunikacija eholokacija / Communication Echolocation

25



V srečanju dveh glasov, dveh vzporedno živečih civilizacij človeka in kita, nastane nov ZVOK-PROSTOR. Glasovi kitov in človeški glas med performansom neposredno generirajo 3D vizualno kompozicijo VIDEO-PROSTOR. S projektom želimo v obiskovalcih vzbuditi močne čutne zaznave in tolikšen potopitveni učinek, da se dovolj oddaljijo od sveta, da lahko razmišljajo o njem in o možnih scenarijih prihodnosti. Eden od njih je zakodiran v središčni zvočni predlogi projekta, bajeslovni slovenski ljudski pesmi Riba Faronika, ki je s svojo domišljijo močjo izjemen ostanek kozmologije naših prednikov. Leta 1952 je bila dokumentirana na lokaciji Podmelec na Tolminskem in govoril o rabi, ki na svojem hrbtnu nosi ves svet. Če bi se obrnila na hrbet, bi to pomenilo njegov konec. Podoben mit živi tudi na Japonskem.

Performance je poetično-raziskovalen večmedijski projekt, ki združuje načeli umetnosti in tehnologije. Nastop v živo poveže z novomedijsko prakso ter tako ustvarja nove estetske kode in senzorična doživetja. Poteče v dialogu »analogne« performerke z zvočno-vizualnim prostorom, katerega elementi se delno generirajo z manipulacijo zvoka in slike, ki ju performerka preko senzorjev na roki aktivira med nastopom. Človeški glas v komunikaciji z glasovi kitov poskuša ustvariti problemska polja današnjega časa, nakazati nove civilizacijske paradigme in misliti druge svetove, ki bodo še nastali. Problematizira čas preloma ter prihodnost in mesto človeške vrste na planetu Zemlja in v možni tranziciji naše civilizacije.

In an encounter of voices and sounds of two simultaneously existing civilizations, that of humans and that of whales, a new SOUND-SPACE begins to emerge. During the performance, the sounds of whales combine with a human voice to directly generate a 3D composition of a VIDEO-SPACE. The aim of the project is to arouse a strong sensory perception as well as to generate an immersion so deep that it enables the spectator to distance himself from the world, enough to make it possible for him to think about the world and the possible scenarios of its future. One of those, the traditional Slovenian folk song Riba Faronika, is encoded in the central sound template of the project. Its imaginative power is an exceptional remnant of the cosmology of our ancestors. It was documented in 1952 at Podmelec in the Tolmin region, and it speaks about a fish that carries the entire world on its back. If the fish were to turn upside down, it would be the end of the world. A similar story can also be found in Japan.

The performance is a multimedia poetical research project that incorporates the principles of art and technology. In combining live performance with a new-media practice it creates new esthetic codes and sensory experiences. It consists of a dialogue between the "analogue" performing artist and the audio-visual space, the elements of which are being generated through the manipulation of picture and sound, activated by the performing artist during the performance via the sensors on her arm. Human voice, in communication with the sounds of whales, tries to establish problem fields of modern times, indicate new paradigms of civilization, and think of new worlds that are about to emerge in the future. It problematizes the break point, the future and the importance of the human species on planet Earth during a possible transition of our civilization.



## futur\_o\_mat: sodelovanje je ustvarjalnost

Inovativen pristop, s katerim si ustvarjate priložnosti, vzpostavljate stike, se povezujete ter sodelujete danes in v prihodnosti.

Pogovarjajte se in sodelujte z drugačno mrežo. Pridobite novo gledišče. Raziskujte raznolikost razmišljanja. Raziskujte drugačne načine sodelovanja.

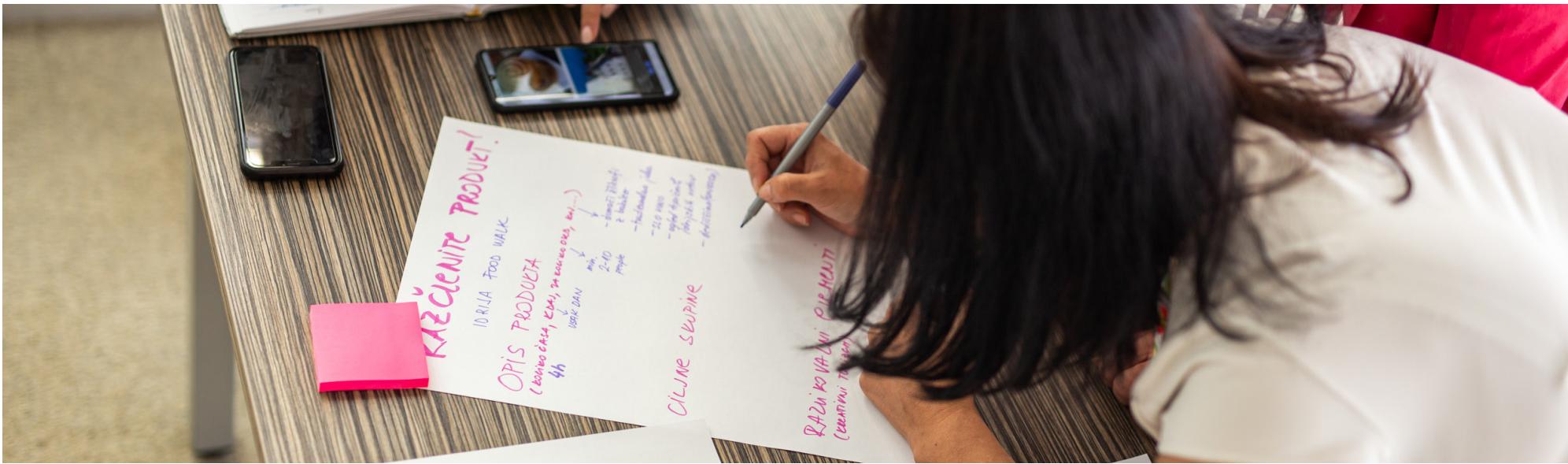
Potrebujemo dolgoročen premislek, ki prednostno obravnava sedanji trenutek. S sodelovanjem lahko oblikujemo sedanji trenutek in trenutke v prihodnosti.

## futur\_o\_mat: collaboration is creativity

An innovative way for you to create opportunities, to establish new contacts, to connect and to cooperate now and in the future.

Talk and collaborate with a different network. Gain a new perspective. Explore a diversity of thinking. Explore different ways of working.

We need long-term reflection that prioritises the present moment. Through collaboration we can shape both the present moment and future moments.



Imate kreativno turistično doživetje, izkušnjo dediščine, pa res ne veste kako se lotiti nadgradnje v digitalno vsebino? Vas je strah finančnega in delovnega zalogaja pri oblikovanju produktov virtualne resničnosti? Pridite na dogodek Potujoče Akademije Kreativnega Turizma, da preženemo te strahove.

Rajzefiber predvsem v COVID19 časih prepoznavata potrebo po razvoju, povezovanju in krepitevi kreativnega turizma v Vzhodni regiji in zato tudi v letu 2021 nadaljujemo z brezplačnimi mentoriranjami in usposabljanji - laboratoriji, klinikami in inkubatorjem s področja kulture, kulturne dediščine, obrti, gostinstva in turizma iz regije v Potujoči Akademiji Kreativnega Turizma - P.A.K.T.u. Projekt P.A.K.T. poteka v koprodukciji Hiše! s Centrom za kreativnost kot del partnerske mreže Platforme Center za kreativnost.

Projekt sofinancirata Evropska unija iz Evropskega sklada za regionalni razvoj in Republika Slovenija. P.A.K.T nastaja v partnerstvu Hiše! z lokalnimi partnerji Javnim zavodom za turizem Ptuj, Zavodom Tura Ptuj, Turističnim društvom Lovrenc na Pohorju, Občino Lovrenc na Pohorju, Razvojnim centrom Murska Sobota, Zavodom za kulturo Slovenska Bistrica, Delavskim domom Trbovlje, Zavodom za turizem Sv. Trojica v Slovenskih goricah, Zavodom za kulturo in turizem Gornja Radgona in drugimi.

Do you have a creative tourism experience, but you really don't know how to tackle an upgrade to digital content? Are you afraid of the financial and labor burden in designing virtual reality products? Come to the P.A.K.T. event - we will help you overcome your fears.

Rajzefiber especially in COVID19 recognizes the need to develop, connect and strengthen creative tourism in the Eastern region and therefore in 2021 we continue with free mentoring and training - Laboratories, Clinics and Incubator in the field of culture, cultural heritage, crafts and tourism in the region through the Traveling Academy of Creative Tourism - P.A.K.T. The P.A.K.T. takes place in a co-production of House! with the Center for Creativity as part of the partner network of the Platform Center for Creativity.

The project is co-financed by the European Union from the European Regional Development Fund and the Republic of Slovenia. P.A.K.T is created in partnership with local partners Public Institute for Tourism Ptuj, Institute Tura Ptuj, Tourist Association Lovrenc na Pohorju, Municipality Lovrenc na Pohorju, Development Center Murska Sobota, Institute for Culture Slovenska Bistrica, Delavski Dom Trbovlje, Institute for Tourism Sv. Trojica in Slovenske gorice, the Institute for Culture and Tourism of Gornja Radgona and others.

## Senster konferanca / Senster conference

### Vizija in retrogradnost kibernetiske skulpture Senster

Dogodek sta zasnovali dr. Magdalena Germek in doc. dr. Kristina Pranjić, ki ga bosta tudi moderirali. Kibernetična skulptura Senster, ki jo je oblikoval poljski umetnik Edward Ihnatowicz in v svoji podobi združuje pojem kinetične skulpture, velja za enega prvih uspešnih primerkov kibernetične umetnosti. Ta neverjetno stabilna, mogočna in hkrati dozdevno delikatna štirimertska hidravlična stvaritev presesti obiskovalca s svojo interaktivnostjo in občutkom, da gre za nekaj živega. Ta učinek doseže, ker v svoji estetiki vključuje kinetična načela.

Ihnatowicz v enem od intervjujev jasno pravi, da je umetnost človeška aktivnost, ki nam odstira izseke resničnosti, ki so ali nevideni ali pa avtomatizirani in zato na videz nepomembni. V tem osnovnem smislu umetnost omogoča stvarem, da vzniknejo v svoji posebnosti in spreminja naš pogled na resničnost, medtem ko tehnologija omogoča uresničitev umetniških idej. Nedavni ponovni zagon Sensterja na pobudo krakovske Univerze AGH za znanost in tehnologijo v letih 2017 in 2018 je sprožil nov niz vprašanj kritično-sociološke in estetsko-filosofske narave, ki izvirajo iz specifičnega konteksta časa, v katerem živimo.

Najprej se seveda pojavi vprašanje financiranja tako dragih projektov v času, ko so finančna sredstva namenjena predvsem uporabni tehnologiji. Po drugi strani oživljjanje kibernetičkih skulptur odpira posebej zanimiva vprašanja v zvezi s kritiko fetišizacije predmeta iz preteklosti. Cilj oživitve preteklih del je ravno v fascinaciji z njihovo zastarelostjo ali s trenutkom iz preteklosti. Ihnatowiczev umetniški ideje so bile že od začetka njegovega ustvarjanja povezane s tehnološko revolucijo in vizionarskim videnjem prihodnosti. Dejstvo je, da sta umetniška in tehnološka revolucija zanj nujno povezani. V zvezi z zahtevko po proizvodnji novega, ki danes skoraj v celoti tvori našo percepциjo umetnosti, se lahko dotaknemo še enega zanimivega vidika, in sicer teme zastaranja in trajanja oblike, ki je, zlasti na področju tehnologije, povezana z idejo napredka, ki se posebej nanaša na razvoj kapitalističnega načina ekonomske proizvodnje. V kibernetični umetnosti je vprašanje zastarelosti še kako pomembno, saj obravnava osrednji trenutek, na katerem sloni posebnost te vrste umetniških del.

Ali je dejstvo, da je Senster nastal kot umetniška skulptura, »rešilo« to delo pred zastarelostjo in je njegovo reaktivacijo zato mogoče videti kot nekaj takega, kot je na primer novo uprizoritev Sofoklove Antigone?

Dogodek sta zasnovali dr. Magdalena Germek in doc. dr. Kristina Pranjić

### The Vision and the Retrogarde of the Senster Cybernetic Sculpture

The Senster Cybernetic sculpture, designed by Polish artist Edward Ihnatowicz, which combines the concept of kinetic sculpture in its design, is considered one of the first successful examples of cybernetic art. This extremely stable, monumental, and at the same time seemingly delicate four-meter hydraulic sculpture surprises the visitor with its interactivity and the feeling of being a living agent. This effect is created due to the inclusion of kinetic principles in the aesthetics of the sculpture.

In one of the interviews Ihnatowicz clearly stated that art is the human activity that is able to open the eyes for these segments of reality that are unseen or are automatized and not recognized as important. In this rudimentary sense, art enables things to emerge in their specificity, and changes our view of reality, while technology allows the artistic ideas to be realized. The recent reactivation of the Senster in 2017/18, which took place at the initiative of the University of Science and Technology AGH in Krakow opened up a new set of questions that are of critical-sociological and aesthetical-philosophical nature, derived from the specific context of our time.

First and foremost, the relevant question emerging is of problematizing the legitimacy of financing such expensive projects, at a time when financial resources are largely allocated mainly to usable technology. On the other hand, however, the revival of cybernetic sculptures opens a particularly interesting question related to the criticism of the fetishization of an object from the past. The goal of this revival of past works is precisely in the fascination with their "obsolescence" or "retro-moment". Artistic ideas of Ihnatowicz were from the very beginning of his work related to the technological revolution and a visionary view of the future. The fact is that the artistic and technological revolutions are for him necessarily linked. In connection with the requirement to produce the new, much of which today also constitutes our perception of art, we touch another interesting aspect – a topic of obsolescence and duration of a form, which is, especially within the field of technology associated with the idea of progress, specific to the development of the capitalist mode of economic production. The issue of obsolescence is a very important issue in cybernetic art, which addresses the central moment on which the specificity of this type of artwork rests.

Is it the fact that the Senster was created as an artistic sculpture that "saves" this work from the obsolescence, and that its reactivation can be seen as something such as, for example, a new staging of Sophocles Antigone?

Concept and moderation of event by dr. Magdalena Germek and doc. dr. Kristina Pranjić



Speculum Artium je že od svojih začetkov gostil študentske projekte iz različnih institucij, kot so Akademija umetnosti (Univerza v Novi Gorici), Akademija za likovno umetnost in oblikovanje (Univerza v Ljubljani), študijski program kulture vmesnika (Akademija za umetnost v Linzu), študijski program EMP informatike (Univerza v Tsukubi na Japonskem), Center za umetnost in znanost iz UCLA (ZDA) itd. Na osnovi naših pozitivnih izkušenj s študenti novo medijske umetnosti se je razvila ideja, da bi del festivala spremenili v izobraževalno platformo, kjer bi se srečali študentje in profesorji z različnih umetniških šol s področja novomedijске produkcije, predstavili svoja dela, izmenjali svoja stališča in znanja in dobili kritične povratne informacije od ljudi zunaj lokalnega umetniškega okolja.

Tako študentje kot njihovi profesorji oziroma mentorji bi sodelovali na razstavi, imeli priložnost predavati, govoriti z umetniki in se pridružiti tematskim razpravam. Letos bo v okviru te pobude potekala razprava na temo »Učenje novo medijske umetnosti leta 2021 - izzivi in priložnosti«.

Pridružili se nam bodo:

prof. dr. Peter Purg z Akademije umetnosti Univerze v Novi Gorici

Aliya Sakhariyeva, vodja Centra za umetnost in znanost na Univerzi ITMO v Sant Petersburgu

prof. Klaus Fruchtnis, Katedra za transdisciplinarne nove medije (magisterski programi), Paris College of Art

Fabricio Lamoncha Martinez, asistent na magistrskem programu Kultura vmesnika, Akademija za umetnost v Linzu

From its beginnings Speculum Artium hosted student projects from various institutions like the School of Arts, (University of Nova Gorica, SI), Academy of Fine Arts and Design (University of Ljubljana, SI), Interface Cultures (Kunstuniversität Linz, AT), Empowerment Informatics (University of Tsukuba, JP), Art and Science center from UCLA (US), etc. Based on our positive experience with new media art students an idea developed to turn a part of the festival into an education platform, where students and professors from different art schools in the field of new media production would meet, present their works, exchange their views and knowledge, get critical feedback from people outside of their local artistic environment.

Both students and professors as their mentors would participate in the exhibition, get an opportunity to give lectures, artist talks, join panel discussions. This year discussion panel on a topic "New media art education in 2021 – challenges and opportunities" will be held as a part of this initiative.

Joining us will be:

prof. Peter Purg, PhD from Academy of Arts, University of Nova Gorica

Aliya Sakhariyeva, Head of the Art & Science Center at ITMO University, Sant Petersburg,

prof. Klaus Fruchtnis, Chair of Transdisciplinary New Media (MA/MFA programs), Paris College of Art,

Fabricio Lamoncha Martinez, University Assistant at Interface Cultures Master Program, Kunstuniversität Linz



**Paris  
College  
of Art**

Paris College of Art (PCA), ustanovljen leta 1981, je privatna univerza v Parizu. Je mednarodna šola z ameriškim pooblastilom za podelitev diplom in akreditacijo Nacionalnega združenja šol za umetnost in oblikovanje (NASAD). Naše poslanstvo je zagotoviti izobrazbo s področja umetnosti in oblikovanja na najvišji ravni, kakršno poučujejo znotraj ameriške pedagoške paradigmе, na katero pa hkrati vpliva francosko in evropsko okolje. Našo mednarodno fakulteto sestavlja sto vodilnih evropskih predstavnikov umetnostne, oblikovne in poslovne industrije. Vsa predavanja potekajo v angleškem jeziku. Študentom, ki prihajajo iz petdesetih držav, nudimo interdisciplinarno izobraževanje, dodiplomski in podiplomski študij, pa tudi študij v tujini, certifikate in počitniške programe.

Founded in 1981, Paris College of Art (PCA) is a private university in Paris, France. The university is a US degree granting institution of higher learning and is accredited by the National Association of Schools of Art and Design (NASAD). PCA's mission is to provide the highest standard of art and design education, taught within an American pedagogical paradigm, while being influenced and informed by our French and European environment. Our international faculty is comprised of 100 leaders in the art, design, and business industries in Europe and courses are taught in English. PCA offers an interdisciplinary education for students coming from 50 different countries, and awards Bachelor's (BA and BFA), and Master's (MA and MFA) degrees as well as study abroad, certificate, and summer programs.

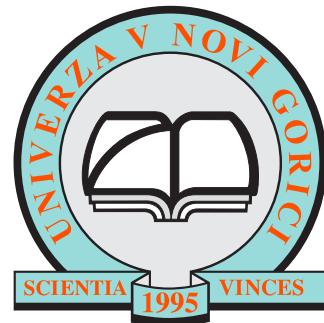


**УНИВЕРСИТЕТ ИТМО**

**Art & Science Center**  
ITMO University

Center znanosti in umetnosti Univerze ITMO je ena prvih ruskih ustanov, kjer je mogoče študirati in razvijati znanstveno in tehnološko umetnost. Magistrski študij znanosti in umetnosti na Univerzi ITMO je prvi magistrski program s tega področja v Rusiji, ki temelji na zblževanju najnovejših dosežkov na področju visoke tehnologije in uporabne umetniške prakse. Program obstaja od leta 2018. Ker gre za mednarodni program, vsa predavanja potekajo v angleščini. Vodja programa je Dimitri Ozerkov, kustos in likovni kritik, vodja oddelka za sodobno umetnost v muzeju State Hermitage. Študentje Univerze ITMO imajo dostop do najsodobnejših laboratorijev in raziskovalnih centrov, kjer delujejo tudi profesionalni umetniki, znanstveniki in kustosi. V času študija imajo študentje možnost predstaviti svoje stvaritve in kuratorske projekte tako na ruskih kot na mednarodnih prizoriščih.

The Art & Science Center of ITMO University is one of the first institutions that turned to the study and development of scientific and technological art in Russia. MSc in Art&Science at ITMO University is the first master's program in art & science in Russia based on the convergence of the latest achievements in the field of high tech and applied artistic practice. The program was launched in 2018 as an international program taught in English. The Head of the program is Dimitri Ozerkov, curator and art critic, head of the contemporary art department of the State Hermitage. Working alongside professional artists, scientists, and curators students enjoy access to ITMO University's state-of-the-art laboratories and research centers. While studying at the program students can create and present their creative or curatorial projects at Russian and international venues.



## AKADEMIJA UMETNOSTI SCHOOL OF ARTS

Akademija umetnosti Univerze v Novi Gorici se osredotoča na razvoj avtorskih osebnosti, suverenih in kompetentnih na več različnih področjih v polju umetnosti in na področju medijev – film, animacija, fotografija, novi mediji in sodobne umetniške prakse.

Za interdisciplinarno in intermedia naravnost izrazito praktičnega študija v kakovostnem akademskem okolju skrbi bogat nabor strokovnih sodelavcev in gostujočih mentorjev. Študentje se ob raznolikih možnostih mobilnosti vključujejo v projekte in sodelovanja tako z lokalno skupnostjo kot s širšim mednarodnim družbenim okoljem.

School of Arts at the University of Nova Gorica focuses on the development of authorial personalities, competent as well as sovereign in several complementary artistic fields and media – film, animation, photography, new media and contemporary art practices.

The interdisciplinary and intermedia orientation of these explicitly practical study programs delivered in a quality academic environment is ensured by numerous referenced collaborators and visiting mentors. Students are presented with several mobility options and involved in international projects and collaborations with both the local community and the wider international social environment.

**kunstuniversitätlinz**  
Universität für künstlerische und industrielle Gestaltung



Univerzo za umetnost in oblikovanje v Linzu sta leta 2004 ustanovila Christa Sommerer in Laurent Mignonneau. Študente interakcije med človekom in računalnikom (HCI) uči razvijati inovativne vmesnike, ki uporabljajo nove vmesniške tehnologije in združujejo umetnost, raziskave, uporabnost in oblikovanje ter raziskujejo kulturne in družbene možnosti njihovega izvajanja. Kot ustvarjalni umetniki in raziskovalci se študentje naučijo razvijati najsodobnejše vmesniške tehnologije in aplikacije. Z interdisciplinarnim raziskovanjem in timskim delom snujejo tudi nove vidike oblikovanja vmesnika, vključno z njegovimi kulturnimi in družbenimi rabami. Teme magistrskega programa v zvezi z interaktivnimi tehnologijami vključujejo interaktivna okolja, interaktivno umetnost, vseprisotno računalništvo, oblikovanje iger, okolja VR in MR, zvočno umetnost, medijsko, spletno in programsko umetnost, raziskave interakcije med človekom in računalnikom (HCI) in oblikovanje interakcij.

The Interface Culture program at the Linz University of Arts Department of Media was founded in 2004 by Christa Sommerer and Laurent Mignonneau. The program teaches students of human-machine interaction to develop innovative interfaces that harness new interface technologies at the confluence of art, research, application and design, and to investigate the cultural and social possibilities of implementing them. Acting as creative artists and researchers, students learn how to advance the state of the art of current interface technologies and applications. Through interdisciplinary research and team work, they also develop new aspects of interface design including its cultural and social applications. The themes elaborated under the Master's program in relation to interactive technologies include Interactive Environments, Interactive Art, Ubiquitous Computing, game design, VR and MR environments, Sound Art, Media Art, Web-Art, Software Art, HCI research and interaction design.

Spletna stran / website:

[speculumartium.si](http://speculumartium.si)

[digitalbigscreen.si](http://digitalbigscreen.si)

[dd-trbovlje.si](http://dd-trbovlje.si)

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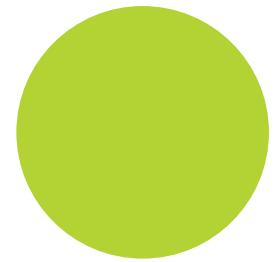
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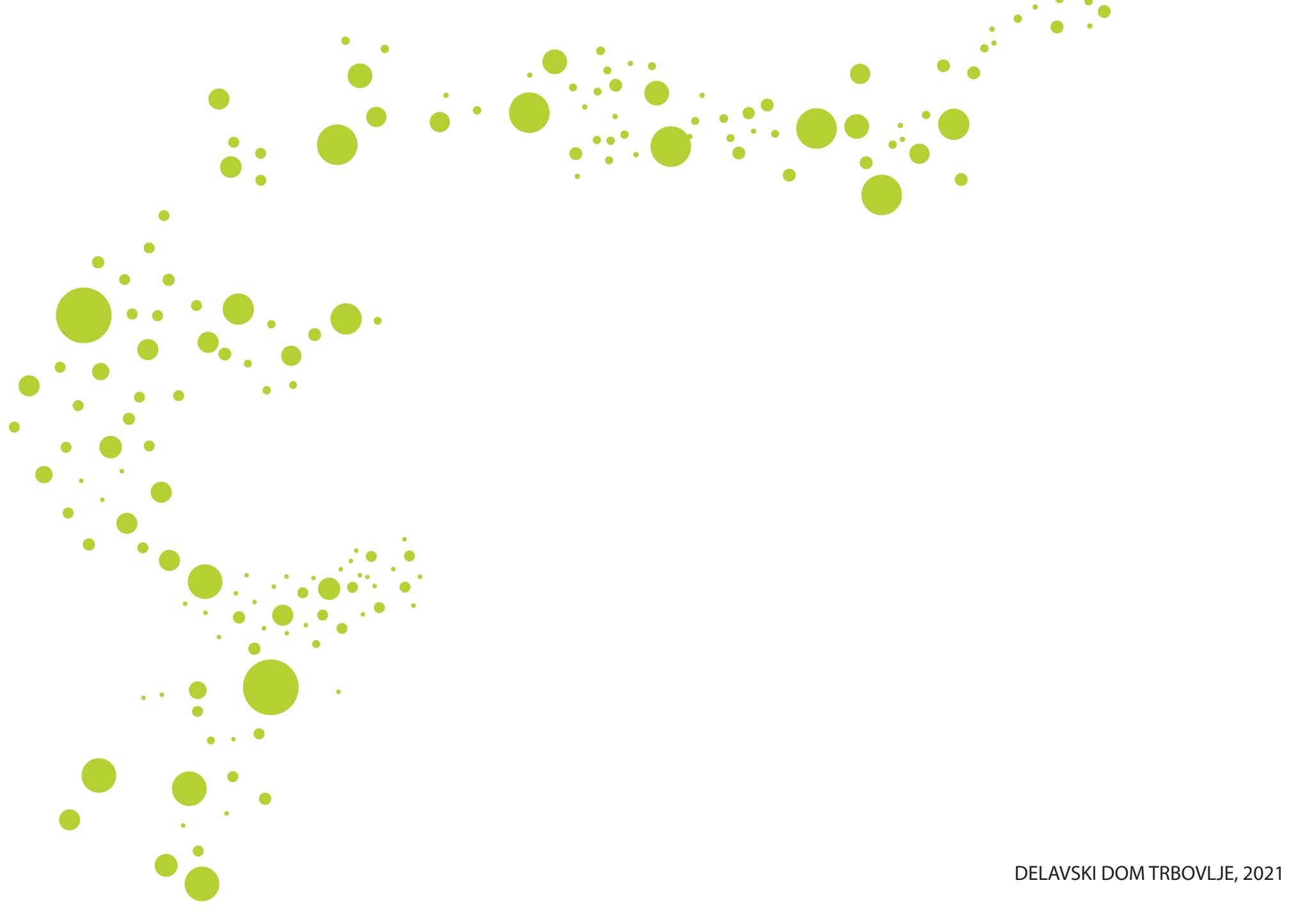
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