

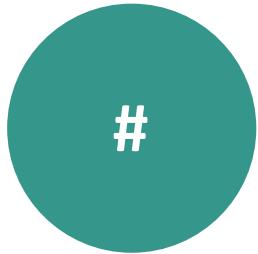
# FESTIVAL NOVOMEDIJSKE KULTURE

# SPECULUM ARTIUM

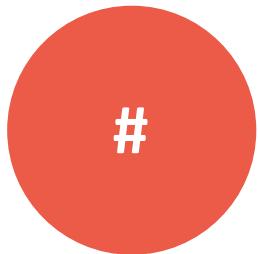
# DELAVSKI DOM TRBOVLJE



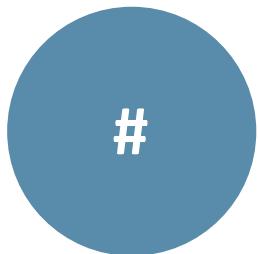
2022



Povabljeni umetniki / Featured artists



Študentski projekti / Student projects



DigitalBigScreen video festival

Štirinajsti festival novomedijske kulture Speculum Artium tudi v letu 2022 vsebinsko prepleta spoznanja preteklosti, dogajanja v sedanjosti in vizijo daljne prihodnosti. Večina festivalskih postavitev se s pomočjo tehnološkega eksperimentiranja vrača k naravi in naravnim procesom razmišljanja ter se osredotoča na preproste vsakdanje procese življenja. Program festivala oblikujejo interaktivni projekti slovenskih in tujih avtorjev, ki se v svojem bistvu vsebinsko približajo razmišljaju malega človeka. Vsak projekt je zgodba zase in vsak projekt je del celote, ki jo zaokrožujejo prepletanja umetnosti – tehnologije in znanosti – gospodarstva – turizma.

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.

Trbovlje svojo novomedijsko vizijo tlakujejo že dalj časa. Delovanje zavoda skozi celo leto nadgrajuje vsebine festivala Speculum Artium, ki predstavlja vrhunc tovrstnega dogajanja v mestu. Njegovo podobo s sodelovanjem in aktivnim vključevanjem snuje tudi lokalna skupnost. Vrednote festivala postopoma postajajo vse bolj tudi vrednote mesta.

Samostojni sklop predstavlja, letos že dvanajsti, mednarodni festival video umetnosti DigitalBigScreen, ki poleg videov, izbranih na javnem natečaju, prinaša tudi umetniška dela v virtualnem svetu.

Velik del festivalskega dogajanja prispeva spremljevalni program, ki vključuje predavanja, performativne predstavitev, delavnice za otroke in mladino, pogovore ter vodstva po razstavnem delu.

In 2022, the fourteenth festival of new media culture Speculum Artium again mixes the discoveries of the past, the happenings of the present and the vision of the remote future. Most of the festival installations are, with the help of technological experimentations, returning to nature and natural processes of thinking, while focusing on the simple processes of life. Program of the festival is composed of interactive projects of Slovenian and foreign authors who, at its core, are approaching the thinking of the little man, content wise. Every project is a story unto itself and every project is a part of the whole, wrapped in the intermixing of art - technology and science - the economy - tourism.

The growth of web and digital contents in all sectors and all spheres of activity, have in the last few years connected the civil society and the academic world; the public sector and the economy. The festival Speculum Artium reflects those changes and connections and is trying to incorporate them into the vision of the working of Delavski dom Trbovlje.

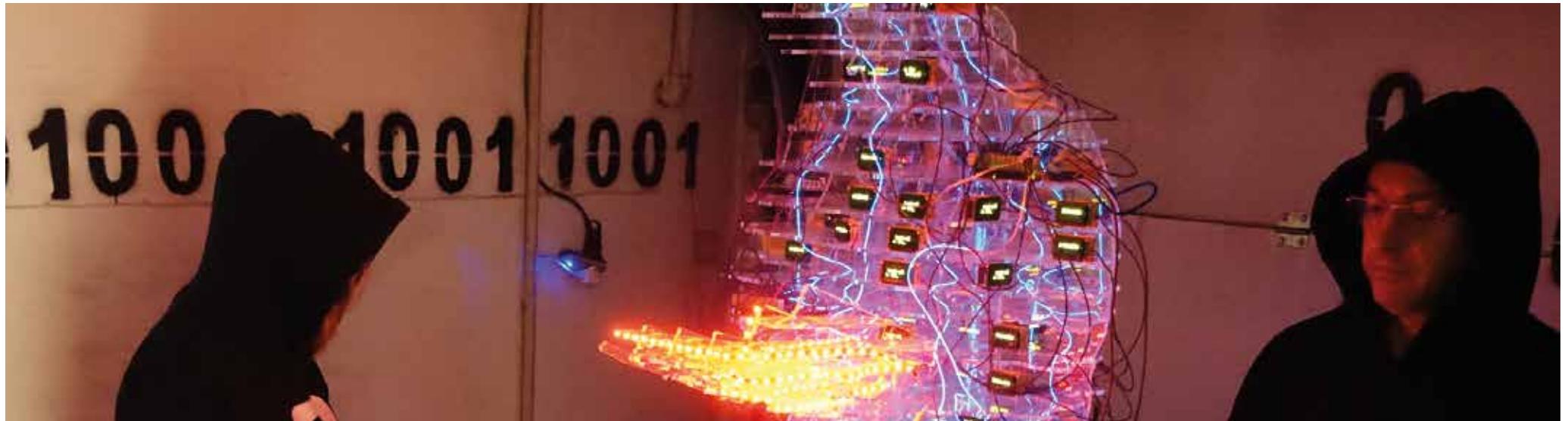
For some time Trbovlje has been paving its new media vision. Throughout the year, the working of the institution is upgrading the contents of the Speculum Artium festival, which represents the peak of such activity in the city. Its image is partially also formed by cooperation and active inclusion of the local community. The values of the festival are becoming the values of the city. An independent part is, for the 12th time in a row the international video art festival DigitalBigScreen, which along with videos, is also bringing works of art in the virtual world chosen by a public tender.

A large portion of the activities are contributed by the accompanying programme, which includes lectures, performances, workshops for children and youth, discussion panels and guided tours through the exhibition.

Špela Pavli Perko, direktorica



## Stanza (UK) - Bralec / The Reader

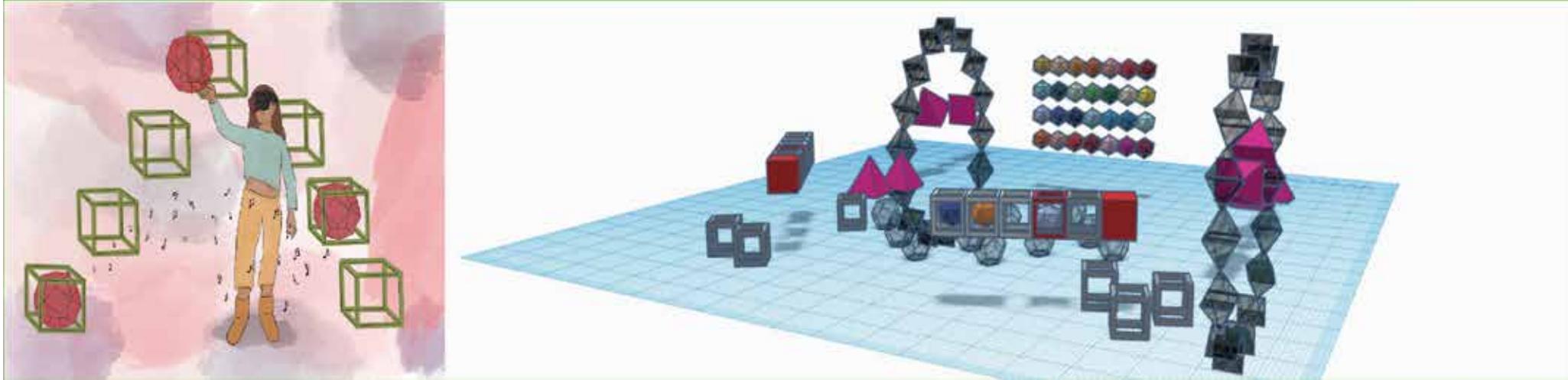


Bralec je sto osemdeset centimetrov visoka skulptura vizualizacije podatkov, ki predstavlja umetnika Stanzo, oblečenega v kapucar, med branjem knjige. Skulptura postane bijoč algoritmom utripa živih podatkov. Sestavljata jo po meri narejena programska in strojna oprema, ki znotraj skulpture porajata dogodke v realnem času. Podatkovno telo služi kot način za spreminjaњe prihodnje predstave o sebi, ko bodo vgrajene tehnologije postale del našega vsakdanjega življenja. Umetniško delo raziskuje nove načine razmišljanja o življenju, pojavljanja in odnose v javnih prostorih ter način, na katere vse našteto vpliva na socializacijo prostorov. Z uporabo odprtih podatkov in novih tehnologij prevprašuje gledalčeve doživljajne dogodkov v realnem času. Živimo v svetu preobilja podatkov, bombardirajo nas izkrivljene informacije, ki so oblikovane tako, da dajejo smisel temu svetu.

Interaktivni sistem temelji na 3D skenu avtorjevega telesa. Sken so oblikovali v oblike, ki so jih razrezali, in nato celotno konstrukcijo sestavili kot sestavljanico. Več kot sto mikro zaslonov prikazuje podatke, ki potujejo po telesu. Oblikovanje in izdelava dela sta potekala več kot leto dni. Na festivalu Speculum Artium 2022 bo skulptura prikazovala odgovore slovenskih dijakov na ključna vprašanja za prihodnost človeštva.

The Reader is a large six-foot data visualization sculpture of the artist Stanza wearing a hoodie reading a book. The sculpture becomes a pulsing algorithmic heartbeat of living data. It is made with custom made digital software and hardware generating live events inside the sculpture. The data body acts to reposition a future view of ourselves when embedded technologies will become part of our everyday lives. The artwork explores new ways of thinking about life, the emergence and interaction within public space, and how this affects the socialization of space. It uses open data and new technologies to question audiences' experiences of real-time events. We live in a world of infobesity, we are bombarded with information that is made malleable and shaped to give it meaning. This interactive system is based on a 3d scan of the artist's body. After scanning the artist's body, the file was modeled into the shapes that are cut. The whole construction is then assembled like a jigsaw. Over one hundred micro display screens show data pulsing through the body and has taken over one year to design and make. At the Speculum Artium 2022 festival, the sculpture will present Slovenian schoolchildren's answers to key questions about the future of humanity.

## Corbin Ordel (CA), Pat Spadane (US) - Hologramski zagnani niz zvončkov za več glasbenikov / HAMCA Hologram Actuated Multiplayer Chime Array



Skozi zgodovino so tako ljubiteljske kot profesionalne glasbenike in skladatelje navdihovale in omejevale mehanske meje instrumentov in ljudi, ki so igrali nanje. Mehanska povezava lahko nedvomno prenese občutja glasbenika v zvok, kar odlično predstavi vsak pritisk tipke na klavirju. Prav tako lahko digitalni sistemi nedvomno olajšajo pretok ustvarjalnosti v zvok in hkrati dopolnijo zmožnosti glasbenika, kar lahko pogosto slišimo v modernih zvočnih pokrajinah. Vabimo vas, da poskusite igrati na Hologramski zagnani sestav zvončkov za več glasbenikov (HAMCA) in tako raziščete zgornje ideje. HAMCA je sestavljen iz dveh stolpov, na katerih je vodoravno obešenih po osem aluminijastih zvončkov, da bi kar najbolj okreplili resonanco. Z misljivo na glasbeno sodelovanje na zvončke udarjajo elektro-mehanični solenoidi, izdelani iz avtomatskega dela klavirja. Nekateri hologrami imajo neposredno povezavo z zvončki: če se dotakneš holograma, zvonček zazveni. Ti hologrami spominjajo na klavirske tipke. Poleg njih se nahaja zbirka večjih hologramskih struktur in objektov. Ti hologrami so rekonstrukcije različnih digitalnih glasbenih orodij v realni velikosti, ki lahko shranjujejo, ponavljajo, množijo in plastijo glasbene motive. Ko raziskujete instrument, vizualni prikazovalniki omogočajo drugim, da vidijo projekcijo holografsga sveta in poslušajo zvenenje zvončkov, ki ga sproža.

Historically, both recreational and professional performers and composers have been influenced and inhibited by the mechanical realities of an instrument and the body playing it. The ability a mechanical connection has to transfer expression from performer to sound is undeniable and exquisitely demonstrated each time a piano key is pressed. However, equally undeniable and repeatedly heard throughout the modern soundscape, is the ability a digital system has to facilitate the transfer of creativity into sound while simultaneously augmenting the capabilities of the performer. To explore these ideas and open the conversation PC invites you to play the Hologram Actuated Multiplayer Chime Array. The HAMCA has two towers of eight aluminum tubular chimes horizontally hung to maximize their resonance. Tuned with musical collaboration in mind, the chimes are electro-mechanically struck by solenoids upcycled from a piano automation system. Some of the holograms have a 1:1 connection to the chimes; touch these holograms and hear the striking of a chime. These holograms can be thought of like a key on a piano. Alongside these “keys” are a collection of larger holographic structures and objects. These holograms are human scale reconstructions of various digital music tools which allow musical thoughts to be stored, repeated, manipulated, and layered. As you explore the instrument, video displays will allow others to see a projection of the holographic realm as they hear the musical results resonating from the chimes.

## Nika Oblak (SI) & Primož Novak (SI) - ŠKATLA / THE BOX

Od kod prihajamo? Kdo smo? Kam gremo? / Where do we Come From? What Are We? Where Are We Going?  
**Neskončni steber / Endless column**



### ŠKATLA

Škatla prikazuje Niko Oblak in Primoža Novaka, ki sta ujeta in poskušata zbežati na plano. Na delo je vplivala nenehna izpostavljenost sporočilom množičnih medijev ter nezmožnost pobegniti njihovim učinkom.

### OD KOD PRIHAJAMO? KDO SMO? KAM GREMO?

Delo Od kod prihajamo? Kdo smo? Kam gremo? prikazuje položaj performerja, ki je ujet v ekran. Brez postanka hodí, kot da bi vrzel ogromno kolo. V resnici pa okorno vrti pravokoten LCD ekran v razmerju 16:9; enega izmed neštetih ekranov, informacijskih tabel in pametnih telefonov, v katerih se utapljamamo v sodobnem življenju.

### NESKONČNI STEBER

Neskončni steber obravnava idejo širjenja dvodimenzionalnega videa v prostorsko instalacijo s pomočjo naprednih tehnologij. Po eni strani nanj vpliva nenehna izpostavljenost množičnim medijem ter nezmožnost umika pred njihovimi učinki, po drugi strani pa delo poskuša zrušiti naše dojemanje ter samoumevnost sodobne tehnologije.

### THE BOX

The Box shows Nika Oblak & Primoz Novak being trapped, trying to escape to the outside. The work is influenced by constant exposure to mass media messages and inability to avoid its effects.

### WHERE DO WE COME FROM? WHAT ARE WE? WHERE ARE WE GOING?

Where do we come from? What are we? Where are we going? shows a situation of performer being caught inside the screen, walking endlessly as if he is spinning a giant wheel, but awkwardly enough spinning a rectangular, a 16:9 LCD monitor, a screen among countless screens, information boards, smart phones, which flood our contemporary existence.

### ENDLESS COLUMN

Endless Column deals with the idea of expanding two-dimensional video into spatial installation by using advanced technological means. On one hand it is influenced by constant exposure to mass media messages and inability to avoid its effects and on the other it attempts to disrupt perception and self-evident status of contemporary technology.

# Shachar Givon (IL), Matan Samina (IL), Ohad Ben-Shahar (IL), Ronen Segev (IL) - Uvidi ribe na suhem / Insights of fish out of water



Kritična zmožnost za preživetje živali je orientacija. Pomembna je za iskanje hrane, zavetja, partnerjev in druge oblike vedenja. Zaradi temeljne vloge in univerzalne funkcije v živalskem kraljestvu je smiselno, da raziščemo, če sta prostorska predstava in orientacija mehanizma, ki sta odvisna od vrste, ekološkega sistema, možganske strukture, ali imata skupne in univerzalne lastnosti. Eden izmed načinov, da raziščemo to vedenjsko temo, je z metodologijo prostorskega prenosa, pri kateri eno živalsko vrsto postavimo v okolje druge vrste, kjer mora biti kos že poznani nalogi (v tem primeru orientaciji). Pričujoči projekt pripelje idejo do njenih meja, s preučevanjem orientacijske sposobnosti ribe v kopnem okolju. S tem namenom smo zlato ribico naučili upravljati vozilo. Gre za kopensko platformo na kolesih, ki se odziva na gibanjske karakteristike, lokacijo in orientacijo ribe v akvariju in v skladu z njimi spreminja svoje mesto v prostoru ter tako premakne akvarij. Naloga rib je bila, da vozilo zapeljejo proti vizualni tarči v kopenskem okolju, ki so jo lahko opazovale skozi stene akvarija, kar jim je tudi uspelo. Vozilo so lahko upravljale, raziskovale novo okolje in dosegle cilj ne glede na svoje začetno izhodišče. Pri tem so se izogibale slepim ulicam in popravljale lokacijske napake. Ti rezultati kažejo, kako je lahko riba prilagodila svoje prostorske predstave in orientacijske sposobnosti v popolnoma drugačnem kopenskem okolju, kar potrjuje hipotezo, da ima prostorska predstava univerzalno lastnost, ki je neodvisna od vrste.

Navigation is a critical ability for animal survival and is important for food foraging, finding shelter, seeking mates and a variety of other behaviours. Given their fundamental role and universal function in the animal kingdom, it makes sense to explore whether space representation and navigation mechanisms are dependent on the species, ecological system, brain structures, or whether they share general and universal properties. One way to explore this issue behaviourally is by domain transfer methodology, where one species is embedded in another species' environment and must cope with an otherwise familiar (in our case, navigation) task. Here we push this idea to the limit by studying the navigation ability of a fish in a terrestrial environment. For this purpose, we trained goldfish to use a Fish Operated Vehicle (FOV), a wheeled terrestrial platform that reacts to the fish's movement characteristics, location and orientation in its water tank to change the vehicle's; i.e., the water tank's, position in the arena. The fish were tasked to "drive" the FOV towards a visual target in the terrestrial environment, which was observable through the walls of the tank, and indeed were able to operate the vehicle, explore the new environment, and reach the target regardless of the starting point, all while avoiding dead-ends and correcting location inaccuracies. These results demonstrate how a fish was able to transfer its space representation and navigation skills to a wholly different terrestrial environment, thus supporting the hypothesis that the former possess a universal quality that is species-independent.

## Marko Batista (SI) - Stekleno nebo / Glass Sky



Zvočna instalacija Stekleno nebo intermedejskega umetnika Marka Batiste je nadaljevanje svojevrstnega umetniškega premisljevanja in raziskovanja sodobne postfaktične družbe v odnosu do tehnološkega napredka ali, preprosto, relacij znotraj trikotnika človek – narava – tehnologija, ki jih avtor premisljuje v kontekstu ekokritičnega diskurza, okoljskih politik ter drugih aktualnih humanističnih konceptov (narava, antropocentrizem, kolonialna kapitalistična matrica ipd.). Instalacija je sestavljena iz vizualnega in zvočnega dela. Vizualni del tvori dvodelna, s 3D tiskalnikom ustvarjena mimetična instalacija urbanega in ruralnega habitata, s katero umetnik ponazori navideznost njune razdvojenosti. Zvočni del instalacije je zasnovan procesno, s pomočjo elektrolize toksičnih spojin, ki v razširjenem elektronskem sistemu v procesu samo-oscilacije in ekstrakcije proizvajajo zvočno sliko. S postavitvijo materije v središče prenese nanjo tudi zastopništvo, kar daje delu za Batisto značilno odprtost, tj. neposredno spremljanje njegovega postajanja, s čimer se vzpostavlja tudi prostor presenečenja.

The multi-channel sound installation Vitreous Sky by the intermedia artist Marko Batista is a continuation of his unique artistic reflection and exploration of modern post-fact society in the light of technological progress, or, to put it simply, the relations within the human-nature-technology triangle, in the context of ecocritical discourse, environmental policies and pressing humanist concepts (nature, the Anthropocene(trism), the capitalist colonial matrix, etc.). The Vitreous Sky installation revolves around two precisely crafted hybrid, visual-sound objects –prototypes of a dystopian habitat of our futures, created by the artist to deal with the project on two interrelated levels, i.e., the symbolic and the physical level of artistic representation. This multi-channel sound installation is a visual-and- audio composition. Produced by a 3D printer, the visual part comprises a two-part mimetic installation of the urban and rural habitats that illustrates their apparent division. Indeed, Batista is fully aware of the interlinkage, influence, and interdependence of all elements that constitute a respective system, as in his artworks, he principally explores different networks. The sonic structure of the installation rests on the electrolysis of toxic compounds, which produce a sound within an extended electronic system in the process of self-oscillation and extraction. Its central position gives matter agency, endowing the work with openness in becoming and a room for surprise.

## Qian Xu (CN) - Zvezdni prah / Star Dust



Zvezdni prah je interaktivna video instalacija, ki jo je navdihnila rudarska dediščina Trbovelj. Skoraj celo stoletje od pričetka obratovanja elektrarne leta 1915 so trboveljski rudarji in delavci garali, da so zagotovili elektriko na Slovenskem. Rudarstvo in pridobivanje elektrike sta postala osnova lokalne ekonomije in tudi pomembna gradnika lokalne identitete. Z zaprtjem elektrarne leta 2015 je mesto odprlo novo poglavje svoje inovativne transformacije. Uporaba premogovega in zvezdnega prahu kot metafore v pričajočem delu povezuje premogov prah, ki predstavlja zgodovino in tradicijo Trbovelj, z zvezdnim prahom, ki predstavlja inovacijo in prihodnost mesta. Drobcem prahu podaja organski ritem algoritem, ki uporablja sistem roja. Obiskovalci vplivajo na prah v instalaciji z gibi telesa. Različni položaji sprožajo mnoge vizualne učinke, ki se prikažejo na projiciranem zaslonu in tako spreminjajo premogov prah v zvezdnega.

Projekt je nastal v sodelovanju z DDT/RUK.

Stardust is an interactive video installation inspired by the mining culture in the city of Trbovlje. For almost a century since the construction of the power plant in 1915, the miners and power plant workers of Trbovlje have been working hard to provide Slovenia with electricity. Mining and power generation became the backbone of the local economy and also a proud cultural symbol for the citizens. With the shut-down of the power plant in 2015, the city has opened a new chapter in its innovative transformation. Using coal dust and stardust as metaphors, this work links the coal dust, which represents the history and culture of Trbovlje, with the stardust, which represents the innovation and future of the city. A swarm system algorithm is designed to give these dust particles an organic rhythm. Visitors interact with the coal dust in the installation using their body movements. Multiple visual effects are triggered by different body postures and will appear on the projected screen, turning these coal dust into beautiful stardust.

Project was developed in cooperation with DDT/RUK.

# Čebelarska zveza Slovenije (SI) - 3D Krajnica / 3D Carniolan



3D kranjica je fizični model čebele delavke *Apis mellifera carnica*, slovenske avtohtone kranjske čebele. Je edinstven poučni in promocijski pripomoček, ki je nastal z uporabo najsodobnejših tehnologij. Za osnovo je služila prava kranjska čebela, do mikrona natančno slikana z Micro CT napravo. Iz tega sestavljen digitalni model čebele je služil izdelavi fizičnega modela s pomočjo 3D tiska. Maketa je izdelana v razmerju 100 : 1 z več kot 90 % morfološko podobnostjo z resnično čebelo in v dolžino meri 170 cm. Vanjo je vgrajenih več kot 200 različnih 3D natisnjenih delov. Čebela je narejena večinoma iz plastike nylon, ki se uporablja pri 3D tisku zahtevnih industrijskih prototipov in vgradnih elementov. Krila so iz prosojnega fotopolimera, njeno telo pa je prekrito z dlačicami iz konjske žime. Sestavljeno oko čebele ima naravno med 5.000 do 6.000 posameznih leč, sestavljeno oko 3D kranjice pa dejansko sestoji iz 5.742 leč. V notranjosti čebele je kovinska konstrukcija, ki nosi celotno telo žuželke in mehatronski sestav z računalniškim krmiljenjem, ki poganja gibljive dele: želo, voskovne ploščice, tipalnice in rilček. Končni model je privajačen na mobilno in vrtljivo platformo ter obogaten z devetimi animacijami v slovenskem in angleškem jeziku.

Idejna zasnova: Boštjan Noč

Vodja projekta: Marko Borko

Strokovna recenzija animacij: dr. Andreja Kandolf Borovšak, dr. Peter Kozmus, dr. Nataša Lilek, Tomaž Samec

Izvajalec: Intri, d. o. o.

3D Carnolian is a physical model of the worker bee *Apis mellifera carnica*, the Slovenian indigenous Carniolan bee. It is a unique educational and promotional tool produced with the help of the latest technologies. The model is based on a real-life Carniolan honey bee, accurately imaged down to the micron using a Micro CT scanner. A physical model was created out of the digital model by 3D printing. The model is made on a 1:100 scale and shares over 90% morphological similarity with a real bee. It has a total length of 170 cm.

It is built out of more than 200 different 3D printed parts and is built out of nylon plastic, commonly used for demanding industrial prototypes and installed elements. The wings are built out of see-through photopolymer while its body is covered with horsehair. The naturally compounded eye of the bee has between 5000 to 6000 lenses, while the compounded eye of the 3D carniolan is built out of 5742 lenses.

Inside the bee is a metal framework, carrying the entire body of the bee and a computer guided mechatronic system, which powers the moving parts of the bee - the stinger, the wax plates/glands, antennae and proboscis. The final model is set onto a mobile and spinning platform and is accompanied with 9 animations in Slovenian and English language.

Conceptual design: Boštjan Noč

Project leader: Marko Borko

Expert review of animations: Andreja Kandolf Borovšak, DSc, Peter Kozmus, DSc, Nataša Lilek, DSc, Tomaž Samec

Realisation: Intri, d. o. o.



Vsi vemo, da je nemogoče najti šivanko v senu. Ampak, ali je nemogoče tudi za robota ali sistem umetne inteligence? Naš namen je točno to: ustvariti industrijsko robotsko roko, ki bo iskala šivanko v senu. Yaskawina robotska roka bo stala v starem skednju, polnem sena, kjer bo skrita zlata šivanka. Če bo robotska roka našla šivanko, bomo v kup sena skrili naslednjo. Vse najdene šivanke bodo razstavljene poleg instalacije.

Umetniško delo lahko razumemo kot dajanje izziva tehnologiji z nalogo, ki je za človeka nemogoča. Umetno inteligenco pogosto razumemo kot črno skrinjico, ki lahko čara. Ampak ali je res tako inteligentna kot trdijo? Veliko je ekspertov – kot Kate Crawford –, ki pravijo, da umetna inteligenco ni niti umetna niti inteligentna. Ali pa jo – kot Jeff Bezos – okličejo za “umetno umetno inteligenco”, ker je konec koncov umetna inteligenco podprtta z izkoriščanjem množice delavcev in slabo plačanih uslužbencev. Poleg postavljanja intelligentnosti tehnologije pod vprašaj, umetniško delo tudi komentira razmerje med človekom in zemljo, kar predstavlja še en konceptni sloj dela.

Projekt je nastal v sodelovanju z DDT/RUK.

Everyone knows that finding a needle in a haystack is an impossible task. But is it for a robot and AI system? Our intention is literally making an industrial arm robot to search for a needle in a haystack. The idea is to place a Yaskawa industrial robot into an old barn full of hay, where a golden needle will be hidden. If the needle is found, then the next needle will be hidden. All found needles will be displayed along with the installation.

The artwork can be viewed as an act of challenging technology with an impossible task from a human point of view. AI is often treated as a black box that can do magic. But is it as intelligent as it is claimed? There are many experts, like Kate Crawford, saying that AI is neither artificial nor intelligent. Or like Jeff Bezos calls it “artificial artificial intelligence”, because in the end AI is backed up by exploitation of crowd workers and badly paid employees. Apart from questioning the intelligence of technology, the artwork makes a comment on the relation of man and land as well, which is another concept layer of the work.

Project was developed in cooperation with DDT/RUK.

## Laibach - Kvadrofenija / Quadrophenics



Velika črna Laibachova kocka, 'made in Trbovlje', je lahko tudi Laibachov 'črni kamen' modrosti, oziroma kamen spotike, meteorit, sestavljen iz množice fragmentov, kamor so ujete izgubljene duše Laibachovih sledilcev, ki so kamen-kocko polirale do gladkega. Vse kar velja za Laibach, velja tudi za Laibachovo kocko, ki je njegovo simbolično, metaforično opredmetenje. Kocka v svojem naravnem stanju miruje in meditira, zvok pa ustvarja in sproža v stiku z zunanjim svetom interaktivno, v prepletu naključnih postopkov in odzivanja na energijo obiskovalcev/uporabnikov/vsiljivcev. Seštevek topotne energije obiskovalcev vpliva na navidezno oziroma naslušno kaotičnost in nasičenost zvočnega jezika. Vsakemu prejemniku je dodeljen po en motiv iz Laibachove kolektivne podzavesti, kinetična energija obiskovalca pa nadzoruje hitrost in smer predvajanja tega motiva. Obiskovalci tako s svojimi telesi in njihovim gibanjem poganajo energetski tok in prispevajo k shizofreničnem, oziroma kvadrofeničnem mentalnem ustroju in odzivanju kocke.

Pri nastanku projekta so sodelovali: DDT/RUK, Društvo TNM, Dewesoft in Mizarstvo Cestnik.

The great black Laibach cube "made in Trbovlje" can also be the Laibach "black stone" of wisdom. The stumbling block - the meteorite, composed of a multitude of fragments, where the lost souls of Laibach followers, who polished the stone-cube smooth, are trapped. Everything that pertains to Laibach also pertains to the Laibach cube, which is its symbolic and metaphoric tangibility. The Cube rests and meditates in its natural state, but creates and releases sound when it comes into interactive contact with the outside world in a mix of random procedures and responses to the visitors/users/intruders. The sum of thermal energy of the visitors influences the seeming, or auditory chaoticness and saturation of the sonic language. Every receiver is assigned one motif from the Laibach collective subconsciousness, while the kinetic energy of the visitor controls the speed and directionality of the playing of this motif. The visitors thus drive the energy flow with their bodies and their movements, contributing to the schizophrenic, or rather the quadrophrenic, mental framing and response of The Cube...

Project was developed by DDT/RUK, TNM Society, Dewesoft, Mizarstvo Cestnik.

# Ivan Cernei (RO) - Izvezeni podatki / Embroidered Data

Where are you from ?  
Åland Islands (Finland)

Output  
Knit / Cross-stich

Where do you live ?  
Åland Islands (Finland)

Stitch / Knit Density  
5 Cells Wide

What's your highest academic degree ?  
Middle School

Choose a color  
D50A09

What field do you work in ?  
Architecture

Show helper grid.

What's your relationship status ?  
 In a relationship.  
 Not in a relationship.  
 Unknown.

How old are you now ?



Izvezeni podatki je spletna aplikacija, ki z uporabo spletne tehnologije ustvarja personalizirane vzhodnoevropske vzorce vezenja za kateregakoli uporabnika. Raziskuje teme identitete in migracij ter naj bi odsevala nove identifikatorje evropskih državljanov. Čeprav je razvoj projekta potekal večinoma med letoma 2015 in 2017, opažam, da se ponovno nanaša na evropske razmere, saj zaradi ruske agresije na Ukrajinou vidimo nove tokove beguncov. Aplikacija upošteva državo izvora, državo bivanja (z vidika populacijske homogenosti, BDP, govorjenih jezikov in manjšin), stopnjo izobrazbe, področje dela, starost in stanje partnerskega razmerja. Iz vseh naštetih informacij ustvari vzorec za ročno vezenje. Delo je rezultat dolgoletnih raziskav tradicionalnih vzorcev vezenja, ki jih lahko srečamo v celotni geo-politično definirani vzhodni Evropi in je bilo ustvarjeno z analizo in sintezo vzorcev od Romunije, Bolgarije, Gruzije, Ukrajine do Estonije in Latvije.

Embroidered data is a web application using web technologies which generates personalised eastern European embroidery patterns for any user. It investigates topics of identity and migration and is meant to reflect new identifiers for the European citizen. While the project has been mainly developed between 2015 and 2017 I find that it currently applies to the European context again as due to the current Russian aggression in Ukraine we are seeing a new influx of refugees. The application is taking into account country of origin, country of residence (in terms of population homogeneity, GDP, spoken languages and minorities), educational level, field of work, age and relationship status. It takes these pieces of information and generates a hand stitch embroidery pattern. The work is the result of a year long research into the traditional embroidery pattern encountered all through-out the geopolitically defined area of Eastern Europe and has been created through the analysis and synthesis of patterns ranging from Romania, Bulgaria, Georgia, Ukraine to Estonia and Latvia.



ZENZ(A)I je umetna inteligenca, ki ustvarja nove pregovore, temelječe na trenutnih vremenskih podatkih, obstoječih pregovorih in mnenjski analizi aktualnih tvitov. Pregovori, ki jih ustvari umetna inteligenca, želijo razvozlati trenutno vreme in tudi napovedati prihodnje vremenske razmere. Umetna inteligenca se tako sooča z izkušnjami neuspeha, preskakovanja misli in odkrivanja, da bi se približala zmožnostim kreativnosti, iz katerih ljudje črpamo svojo ustvarjalnost.

Stvaritev umetne inteligence nas prisili, da ponovno premislimo, kaj pomeni biti človek, in nam omogoča, da izzivamo antropocentrični pogled, pri katerem je človeštvo postavljeno nad vse druge vrste in verjame, da je edinstveno. Tako je človeški pogled na realnost razumljen kot zgolj eden izmed mnogih pogledov in nas oddalji od vrednotenja o tem, kateri pogled je boljši.

Od ZENZ(A)I lahko zahtevamo vremenski pregovor preko spletne strani [www.zenz-ai.net](http://www.zenz-ai.net). Ko je vnešena trenutna lokacija, bo prikazano vreme v izbranem mestu in našteti tviti, ki jih je umetna inteligenca analizirala. Sledila bo kategorizacija splošnega mnenja, ki bo ustvarjena iz te analize. Nov vremenski pregovor se pojavi po nekaj sekundah, ko ga zahtevamo. Lahko ga natisnemo, shranimo, kupimo ali pa delimo preko družbenih omrežij. Po tem lahko ocenimo ustvarjeni pregovor in damo umetni inteligenči povratno informacijo ter tako pripomoremmo k razvoju izkustva. Ne glede na oceno so vsi pregovori, ki jih je ustvarila ZENZ(A)I objavljeni v arhivu.

ZENZ(A)I is an artificial intelligence that creates new weather sayings based on current weather data, existing sayings and sentiment analysis of current tweets. These new sayings, created by artificial intelligence, aim to interpret current weather and also predict future weather conditions. Artificial intelligence therefore confronts principles such as failure, wandering and discovery to approach the creative capacity from which humans derive their creativity.

The creation of artificial intelligences makes us rethink what it means to be human and also allows us to challenge the anthropocentric vision, in which the human species is above other species and believes itself to be exceptional. In this way, the human perception of reality is understood as one possible vision among many others, thus distancing us from making value judgements about which vision is better.

A weather saying can be requested from ZENZ(A)I through the website [www.zenz-ai.net](http://www.zenz-ai.net). Once the current location has been entered, it will display the weather of the selected city and list the different Twitter messages that the AI has analysed, followed by the categorisation of the sentiments extracted from this analysis. One can subsequently rate the created saying to give feedback to the artificial intelligence and thus contribute to the evolution of its experience. Regardless of the rating, the website includes all the sayings created by ZENZ(A) I in the archive section.

# Valerie Wolf Gang (SI) - Čudovit obraz umetne inteligence / The Beautiful Face of AI



Projekt Čudoviti obraz umetne inteligence nadaljuje umetničino raziskovanje odnosa in vpliva družbe na vlogo posameznika, ki jo gradi več plasti identitete in samozavedanja. Digitalno ogledalo tako pokaže odsev gledalca, vendar se njegova podoba začne počasi spremenjati glede na aktualno stanje v svetu. Za parametre spremenjanja tako uporabi podatke, kot so trenutno stanje vrednosti svetovnih delnic in kriptovalut, temperatura ozračja, število svetovne populacije, dvigovanje gladine morja ipd. Vse te velike baze podatkov tako v živo vplivajo na podobo odseva posameznika v ogledalu in soustvarjajo identiteto posameznika. Parametri aktualnega dogajanja v svetu tako vplivajo na obliko in organsko spremenjanje obraza in vsakemu se pred očmi v ogledalu začne generirati nova podoba, ki je skupek realnega fizičnega telesa, preoblikovanja in pogleda družbe s svetovnega spletka, ki soustvarja našo končno podobo.

Projekt je nastal v sodelovanju z DDT/RUK.

"The Beautiful Face of AI" project continues the artist's exploration of the relation and influence between the society and the individual, which is built upon several layers of identity and self awareness. The digital mirror shows the reflection of the viewer, however their image begins to slowly change with regards to the current state of the world. To change the parameters it uses information such as the current stock indexes, cryptocurrency values, the temperature of the environment, current global population, sea level, etc. All of these large databases influence the reflection of the individual live and co-construct the identity of the individual.

The parameters of actual world-happenings thus influence the form and the organic shaping of the face. In front of the eyes of the viewer, the mirror generates a new image, which is a composition of the real physical world, the reshaping and the view of the society online which co-creates our final image.

Project was developed in cooperation with DDT/RUK.

## Avery Odlazek (SI) - The NAO Tamagotchi Project / Projekt NAO Tamagochi



Tamagotchiji so bili linija igrač v 90. letih preteklega stoletja, ki so omogočale, da se igrate z digitalnimi živalmi. Čeprav so bili namenjeni predvsem otrokom, so bili eni izmed prvih primerov človekovega povezovanja s tehnologijo na osebni ravni. Ljudje so rasli in se prilagajali svojim ljubljenčkom ter jih zato videli kot bolj človeške.

Cilj NAO Tamagotchi projekta je prenesti enak občutek v robota NAO. Udeleženci ne samo skrbijo za digitalnega hišnega ljubljenčka, ampak ga tudi vidijo kot v živo. Poleg tega želimo tudi nadaljevati programiranje in razvoj aplikacij, ki običajno ne bi delovale na robottu NAO. Čeprav gre zgolj za program na robottu, upamo, da bo instalaciji uspelo še bolj povezati ljudi in stroje, ne le v obliki skrbi za robott, ampak tudi skozi občutek medsebojnega simboličnega odnosa.

Projekt je nastal v sodelovanju z DDT/RUK.

The Tamagotchi was a line of toys in the 90s, that let you play with a digital pet. Although it was mainly intended for kids, it was one of the first examples of humans connecting with technology on a personal level. The people grew and adapted with their pets, and with that saw them as more human.

The NAO Tamagotchi project aims to deliver that same feeling into a NAO Robot, so that not only do the participants get to care for a digital pet, but also see it in person, as well as continue to program and develop apps that would normally not be able to function on the very event-based NAO Robot.

Although it is just a program on a robot, we hope the installation manages to connect humans and machines even further together, not only in the form of caring for the robot, but through the feeling of a mutual symbiotic relationship.

Project was developed in cooperation with DDT/RUK.

## Gospod Procesor, razumete življenje / Mr. Processor You Understand Life



Gospod Procesor je dvokolesni robot s tako visoko zmogljivo umetno inteligenco, da se zaveda samega sebe. V nasprotju z avtorjevimi pričakovanji je robot v trenutku, ko se je začel obnašati na nevljuden in družbeno nesprejemljiv način. Delo nam ponuja presenetljiv, ironičen pogled na to, kaj bi v resnici pomenilo prenesti človeškost v stroj – in je, v končni fazi, bolj ogledalo nam, kot tako imenovanim »inteligencam«, ki jih rojevajo naše Prometejanske sanje.

Mr Processor is a two-wheel self-balancing robot endowed with such a highly capable AI that it is self-aware. Contrary to all his author's expectations, the robot almost immediately added mind-numbing code to its software and began acting in a rude and socially unacceptable way. The work offers us a surprising, ironic take on what would actually mean to imbue "humanity" into a machine – and, ultimately, it's more about us than the so-called "intelligences" to which our Promethean dreams are giving birth.

## Seymour & Lehrn (UK)

### Let ob čebeli v navidezni resničnosti / VR Fly Alongside a Bee



Let ob čebeli v navidezni resničnosti je imerzivni 360° video, ki vas prenese v mikro življenjsko okolje, kot če bi bili sami veliki kot čebela.

Raziščite vrt iz zraka, ko sledite letu čebele, in si poglejte še ostale žuželke in druge živali na svoji poti. Ko končate svoj polet, se lahko vrnete v panj, odložite cvetni prah in ga spremenite v čebelji kruh.

Čebele imajo neverjetno nalogo izdelave medu in kruha, s katerima hranijo svoje ličinke, in jim tako pomagajo, da se spremenijo v močne čebele delavke ali pa v čebele matice.

Sferični 360° video posnetki, so odličen način, da se vživite v drugačen svet živali in ga vidite z njihove perspektive.

Z uporabo Seymour & Lehrn aplikacije za virtualno resničnost lahko izkusite imerzivne 360° video posnetke visoke kakovosti, ki izpostavljajo vsakodnevno življenje čebele, in se naučite nekaj več o tem, kaj se dogaja tako zunaj panja kot v njem.

VR Fly Alongside a Bee is an immersive 360 video that takes you into the microhabitat world as if you were the size of a bee itself.

Tour the garden from the air as you follow the flight of a single bee and see what other insects and animals you cross paths with. Once your flight is complete you can head back to the hive to deposit the pollen you've collected and turn it into bee bread.

Bees have an amazing job of making honey and bread to feed their larvae and help them grow into strong worker bees or royal bees that will go onto become queens!

360 videos are a great way to get immersed in the different worlds of animals and see it from their point of view.

Through the power of the Seymour & Lehrn VR app, you can experience an immersive high quality 360 video that highlights the daily life of a bee and learn a little bit more about what goes on out in the field as well as in the hive.

## Mariia Moshchenskaia (RU), Siraj Farhan (RU), Veronika Prizova (RU), Mikhail Shalepo (RU) - Plantoverse



Plantoverse, biomorfna medijska skulptura, je model pogleda rastline na svojo oklico. Umetniki nam ponujajo nove principe interakcij med ljudmi in rastlinami, ki temeljijo na ustvarjanju čustvene povezave in razvoju zanimanja za svet rastlinstva. Možnost, da se vidimo skozi optiko rastlinskega organizma, omogoča spremembo običajnega pogleda na svet – vidimo lahko skozi "oči" drugega. S preizkušanjem nečloveške bio-optike tako ne pridobimo samo zmožnosti, da gledamo na drugega kot na subjekt individualnega življenja, ampak tudi redefiniramo meje razmerij znotraj večvrstnega ekosistema.

Plantoverse biomorphic media sculpture is a model of a plant view on the surrounding world. The artists propose to consider a new principle of interaction between humans and plants, based on the creation of an emotional connection and the development of interest in the world of flora. The ability to see yourself through the optics of a plant organism allows you to change the usual perspective of the view — to see through the «eyes» of another. By trying on non-human bio-optics, we not only become able to look at the other as a subject of individual life, but also redefine the boundaries of relationships within a multi-species ecosystem.

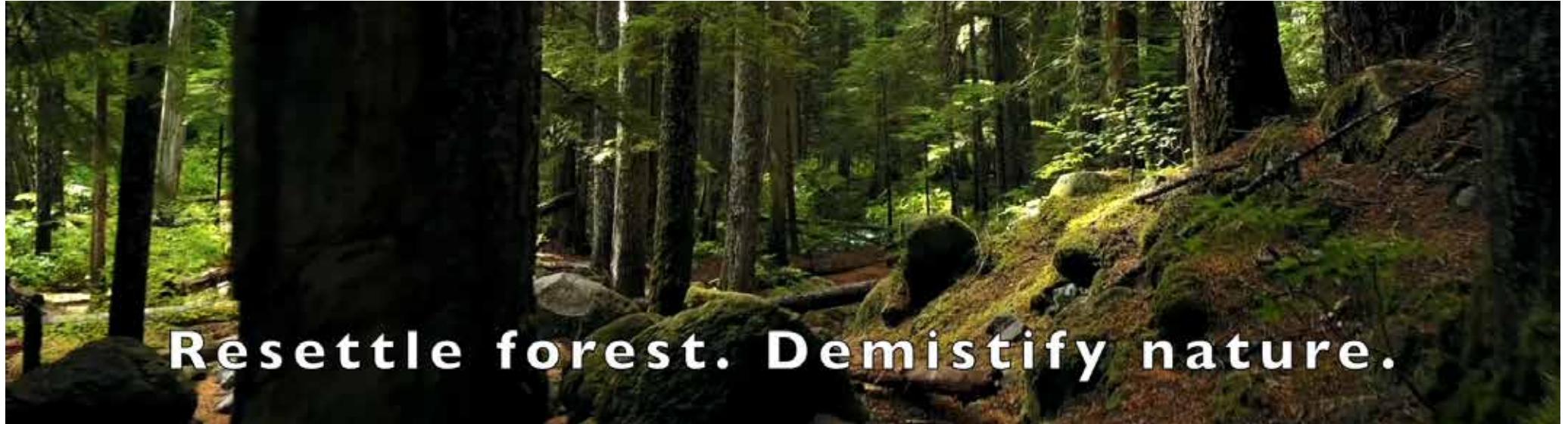
## Daria Okhrimenko (RU) - Boljša realnost: eksperimentalna terapija za depresijo pri hobotnicah / Better reality: Experimental depression treatment for cephalopods



Ujete hobotnice se soočajo z depresijo. Dolgočasi jih varno življenje, v katerem ni potrebe po borbi, lovju, igri in raziskovanju. Projekt govorji o tem, kako si ljudje delijo dolgčas in depresijo z drugimi vrstami. Prav tako predlaže uporabo modernih tehnologij, da bi izboljšali kakovost življenja hobotnic v akvarijih.

Hobotnici ponudimo zavetišče v obliki vrča ali amfore (To je oblika, ki jo najpogosteje izbirajo prostoživeče hobotnice in ki jo uporabljajo lovci za svoje pasti, ko jih lovijo.). Zavetišče ima vgrajeno kamero in ekran. Ko je hobotnica v zavetišču, se prižge projektor in prikaže film, narejen posebej zanjo, v katerem v glavni vlogi nastopajo njeni sovražniki (murena, ribe plenilke, morski psi itd.) Ko je v zavetišču, se lahko tako hobotnica potopi v sanje o nevarnosti. Zavetišče je ponovno uporabljenega igrača, poznana v mnogih kulturnah: roly-poly. Gre za igračo z okroglim dnom, običajno oblikovano kot jajce, ki se poravna pokonci, ko jo poskusimo prevrniti. Lutka je običajno votla z utežmi v spodnji polovici. V tem projektu je utež hobotnica. Ali pa človeški vpliv na življenje ne-človeških entitet.

Captive octopuses experience depression. They are bored by safe life, there is no need to fight, hunt, play and investigate. The project is about how humans share their boredom and depression with other species. Also, it proposes to use modern technologies to improve the quality of life of octopuses in aquariums. The octopus is offered a shelter in the shape of a jug or amphora. (This is the shape preferred by free octopuses, and most often this is the shape that hunters choose for their traps for octopuses.) The shelter has a built-in camera and screen. When the octopus is in the shelter, the projector turns on. It shows a movie specially made for the octopus. Its main characters are the enemies of the octopus (moray eel, predatory fish, sharks, etc.). Thus, once in its shelter, the octopus can be transferred to dreams of danger. The shelter is an upcycled plastic toy well known in many cultures. Is a children's toy roly-poly. It is a round-bottomed toy, usually shaped like an egg, that straightens up when pushed at an angle. The toy is usually hollow with a weight inside the lower hemisphere. In the project this weight inside is octopus. Or human influence life of non-human agents.



Krotenje gozda je hibridni raziskovalni proces na presečišču umetnosti in znanosti, ki se bo s svojo nadaljnjo, performativno fazo premierno predstavil na festivalu Speculum Artium 2022 – raziskovalno-umetniški video bo nadgrajen z eksperimentalnim zvočnim performansom. Kot projekt se Krotenje gozda osredotoča na razlike v metodologijah in semiotiki med umetnostjo (novi mediji, vizualizacija, glasba) in znanostjo (kulturna zgodovina, kritična teorija, filozofija). Temelji na očitnih sinergijah med umetniškimi in znanstvenimi pristopi v raziskovanju, ki pomembno prispevajo k obogatitvi in kontekstualizaciji umetniškega procesa na eni strani ter optimizaciji in razširitvi znanstvenoraziskovalnih rezultatov na drugi. Video Krotenje gozda interpretira arhivske vire o gospodarjenju z gozdovi na Krasu ob prelomu 19. in 20. stoletja. Obenem prinaša tudi nova spoznanja o gospodarjenju z gozdovi v času pogozdovanja Krasa ter sodobna razmišljjanja o odnosu med človekom in naravo. Kompleksnost izkušnje gozda je posredovana preko zemljevidov in fotografij kot tudi ilustracij lokalnih ptic ter posnetkov njihovega petja, ki jih dopolnjujejo slike, ustvarjene z umetno inteligenco. V celoto jih povezuje zvočna kompozicija, ki se prepleta z govorjeno teorijo o kompleksnih sistemih.

Taming the Forest is a hybrid research process in the art-science domain that will premiere its further, performative phase at the 2022 Speculum Artium festival – the research-artistic video will be continued by an experimental sound performance. As a project, Taming the Forest focuses on differences in both methodologies and semiotics between art (new media, visualisation, music) and science (cultural history, critical theory, philosophy). It is based on the evident synergies between artistic and scientific approaches in research that significantly contribute to the enrichment and contextualization of the artistic process on the one hand, and the optimization and widening of scientific research results, on the other. In the video, Taming the Forest provides an interpretation of archival sources about forest management in the Karst at the turn of the 19th and 20th centuries. At the same time, it also brings new findings about forest management during the afforestation of the Karst, and timely reflections on the human-nature relationship. The complexity of experiencing the forest is given both through maps and photographs as well as in original illustrations of local birds and records of their singing, complemented by images created with artificial intelligence. They are connected into a whole by a sound composition that intertwines with spoken theory on complex systems.

## Lucija Ivšić (HR) - Iz česa so narejeni domovi - arhitektura izkoreninjenosti / What Homes Are Made Of - The Architecture of Displacement



V tem interaktivnem izkustvu virtualne resničnosti v velikosti sobe, ki je bil popolnoma ustvarjen z LIDAR tehnologijo med podaljšanim zaprtjem zaradi pandemije leta 2021, 110 milijonov točk rekonstruira stanovanje umetnice v Melbournu v Avstraliji in tako simbolično izpostavlja razmerje, ki obstaja med migracijo, prostorom in identiteto. V izkustvu virtualne resničnosti lahko obiskovalci prosto vstopijo in raziščejo dom umetnice, tako da v njem fizično hodijo ali pa da se teleportirajo znotraj njega. Ko si gledalec nadane očala za virtualno resničnost, se znajde v sedečem položaju v običajnem stanovanju z vsakdanjim pohištvo; ki pa je brez trdnih oblik. Kmalu po tem – odvisno od radovednosti gledalca – gledalec opazi, da – čeprav je še v istem stanovanju – ni več sam in da je bila ustvarjena vez med realnostima. Takrat se stanovanje začne vizualno spreminti, slišijo se zvoki iz doma umetnice na Hrvaškem in tako zapolnijo prostor s spomini na njene starše in tradicionalne skupne nedeljske gostije. V skladu s "kvantnimi razmerji" Karen Barad, ki govorijo o simultanem obstoju na dveh prostorih hkrati in o tem, kako se spomin ob priklicu vsakič znova ustvari na novo, to delo raziskuje, kako izkusimo in "poznamo" prostor skozi svoje spomine in skozi spomine drugega.

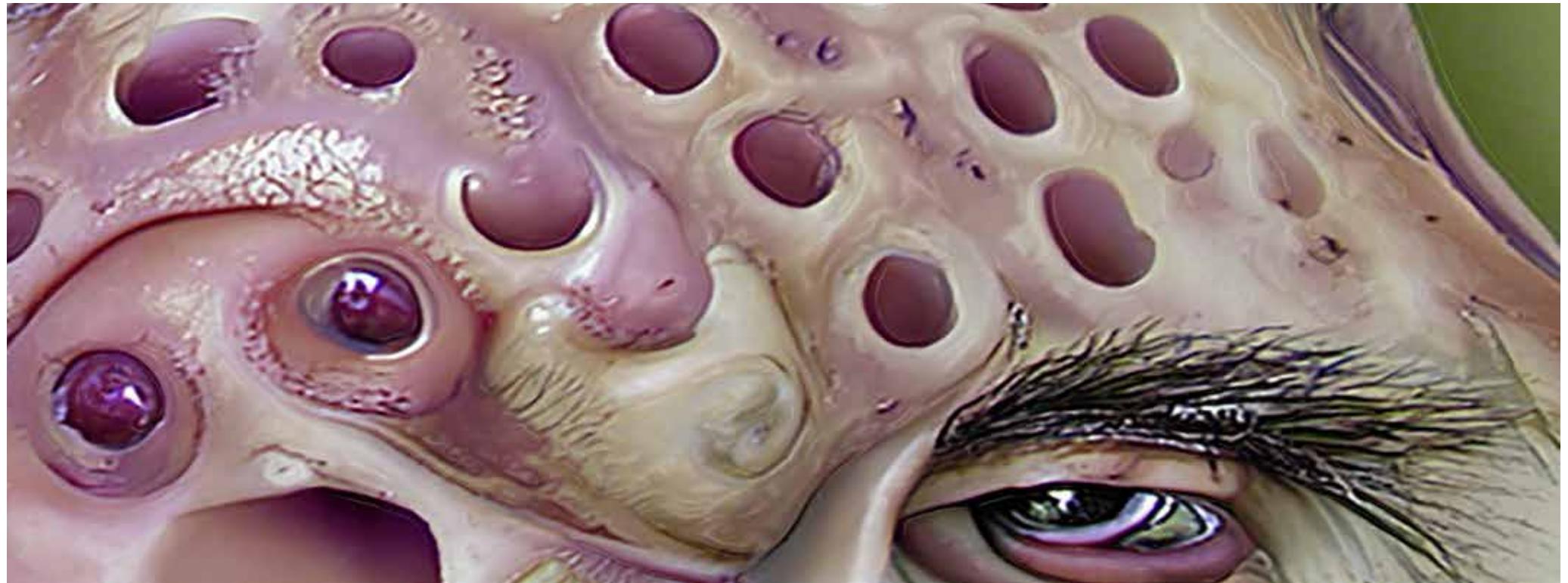
In this room-scale, interactive VR experience, entirely created with LiDAR technology during an extended lockdown due to the pandemic in 2021, 110 million points re-construct the artist's apartment in Melbourne, Australia, while symbolically highlighting the relationship that exists between migration, place, and identity. In this VR experience, visitors can enter and freely explore the artist's home, by either physically walking, or teleporting within it. Once the viewer has the headset on, they find themselves seated in what seems to be an ordinary apartment furnished with common furniture, yet entirely deprived of any solid shapes. Soon after, depending on the viewer's curiosity, although still located in the same apartment, the viewer will notice that they are not alone anymore and that a bridge between realities has been established. That is when the apartment starts to change visually; introducing sounds from the artist's original Croatian home, filling up the space with memories of her parents and the traditional Sunday feasts they had together. Resonating Karen Barad's "quantum entanglements" that speak of being in two places at once and how memory can be recreated each time it is invoked, this work explores how we experience and "know" a place through our own and someone else's memories. Using familiar sounds from her family home in Croatia to mediate her personal memories in present living conditions, the artist examines how the isolation from family and past homes and their memory can affect one's perception of place and identity.



<unk> stroj je interaktivna imerzivna izkušnja, ki vznika iz kolaboracije z modelom za strojno učenje. Rezultat soustvarjanja je zgodba, ki je prikazana v spletni 3D obliki in omogoča, da jo gledalec izkusi na svoj način in v svojem tempu. Predstavlja novo obliko pripovedovanja ter obenem povezuje akademsko raziskovanje, ki ga predstavi na bolj dostopen način, s širšo javnostjo. Sama zgodba prikazuje vizijo strojnega učenja o prihodnosti človeštva ter refleksijo o sedanjosti, vendar na svoj unikaten in pogosto ne popolnoma definiran način. Tako povzroči, da v gledalcu vzniknejo vprašanja o eksistenci kot taki. Obenem pa pripoved spremlja različne animirane 3D scene, s katerimi lahko gledalec po želji komunicira, ter tako dodajo novo plast podobam ter besedam. Ime projekta se nanaša na zapleteno interakcijo z modelom za strojno učenje, ki zaradi omejenega besedišča neznane besede označi kot <unk> (neznani žeton).

<unk> machine is an interactive immersive experience, sprouted from a collaboration with a machine learning model. The result of co-creation is a story, presented in 3D form, which enables the viewer to experience at their own tempo. Representing new form of storytelling it simultaneously connects the academic research, which it represents in a more approachable way, with the general public. The story itself presents a machine learning vision of the future of mankind and a reflection of the present time, but in its own unique and often not completely defined way. It thus causes the viewer to question existence on its own. Simultaneously the story is accompanied with various 3D animated scenes, with which the viewer may communicate at leisure, thus adding a new layer to images and words. The name of the project relates to a complex interaction with a machine learning model, which due to its own limited vocabulary designates unknown words as <unk< (unknown token).

## Barbara Jazbec (SI) - Nenavaden TV / The Uncanny TV

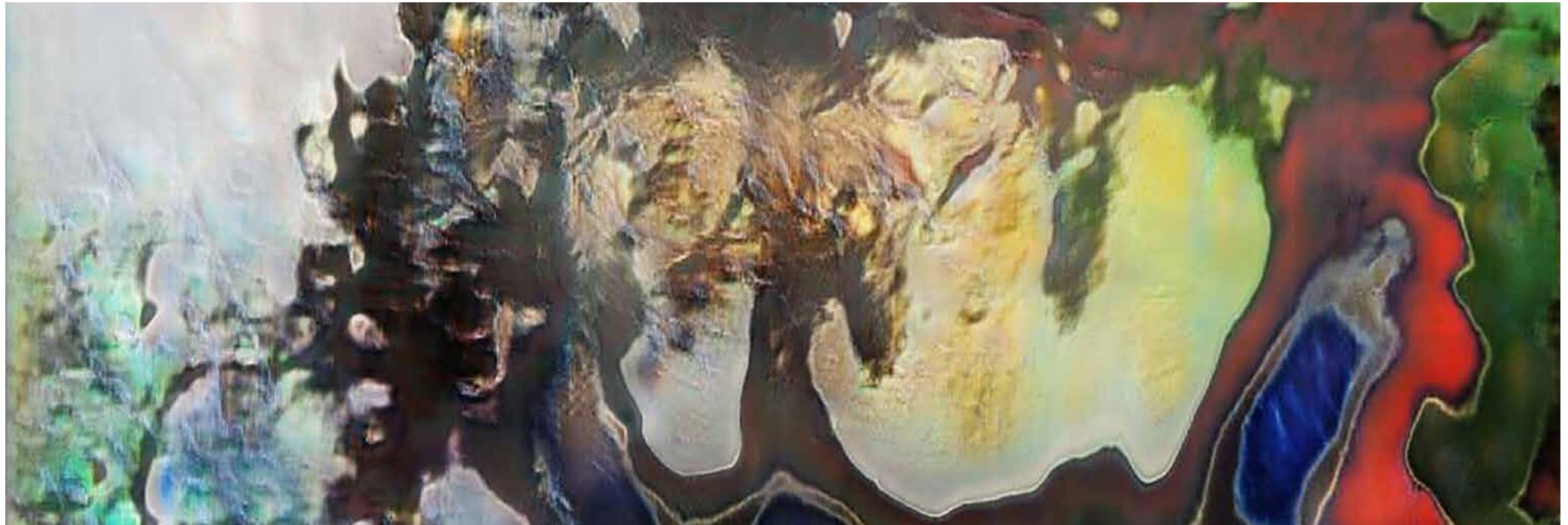


Nenavaden TV je interaktivna instalacija, ki gledalca vabi, da z brskanjem po televizijskih kanalih odkriva skrivnosti duha, ki se skriva v nenavadni domišljiji elektronskih medijev. Televizijski kanali v instalaciji so kombinacija animacije in video del, ki jih generira umetna inteligenco in ki ponujajo globoko raziskavo sveta nenavadnosti.

Kot je dejal Ernst Jentsch: »Če se hočeš približati bistvu nenavadnega, je bolje, da se ne sprašujemo, kaj to je, ampak raje razičemo, kako v psihološkem smislu nastane učinkovito vzburjenje nenavadnega, kako morajo biti psihični pogoji vzpostavljeni, da se pojavi 'nenavadni' občutek.«

"The Uncanny TV" is an interactive installation whereby browsing through TV channels the spectator is invited to discover the mystery of the ghost hidden inside the uncanny imagination of electronic media. The TV channels in the installation are built from AI-generated animation and video works. They bring a deeper investigation into the world of uncanniness. As Ernst Jentsch said: "If one wants to come closer to the essence of the uncanny, it is better not to ask what it is, but rather to investigate how the effective excitement of the uncanny arises in psychological terms, how the psychical conditions must be constituted so that the 'uncanny' sensation emerges."

## Indiara Di Benedetto (IT) - Bodoči spomini globoke vode / Future Memories of Deep Water



Kaj so spremenljivi pogoji za arheologijo v podvodnih ekosistemih? Ali lahko predvidimo izzive in si zamislimo rešitve s pomočjo strojnega učenja? Skozi tok časa postanejo podvodni artefakti obdani s koralami, z algami in z drugimi podvodnimi organizmi. Kako človeška aktivnost in onesnaženje spodkopavajo ta naravna okolja? Kakšna bo naša podvodna zapuščina v prihodnosti? Projekt Bodoči spomini globoke vode raziskuje, kako lahko uporabimo algoritme za napovedovanje novih prepletov med podvodnimi artefakti in spreminjačočimi okolji, kjer jih odkrijejo. Premišljujemo o trenutnih problemih in nevarnostih za morska okolja, kot so naprimer "plasticrust" (mešanica kamnov in plastike) in onesnaženje s plastiko. Zgrajen na eksperimentalnem razmisleku Bodoči spomini globoke vode poziva k zaščiti ogroženega morskega ekosistema in želi ustvariti ozaveščenost in spodbujati varovanje kulturne dediščine.

What are the changing conditions for archaeology in underwater ecosystems? Can challenges be predicted and solutions imagined using machine learning? With the passage of time, underwater artifacts are encrusted with coral, algae or other marine organisms. How do human activities and pollutions undermine these natural environments? What will our underwater heritage be like in the future? The project "Future Memories of Deep Water" explores how algorithms can be used for predicting new entanglements between underwater artifacts and the changing environment where they are discovered. We reflect on current problems and dangers for marine environments, such as "plasticrust" and plastic pollution. Built upon experimental speculation, "Future Memories of Deep Water" calls for the protection of threatened marine ecosystems and aims to create awareness and encourage preservation of cultural heritage.

## DigitalBigScreen 360° Tekmovalni program / Competitive programme



**Prvo mesto / first place**  
Kuan-Yuan LAI - The Train Hamasen (2017)



**Drugo mesto / second place**  
Kevin Blackistone - HyperSpectral



**Tretje mesto / third place**  
Gabriella Presnal – Alien



**Izpostavljeni umetnik / featured artist**  
Yu-Hsuan Yao - Lagoon

**DIGITAL  
BIG  
SCREEN**

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



**Izpostavljeni umetnica / featured artist**  
Anabela Costa - Holes of Matter



ODE@360

Plesna predstava TEBI vabi gledalca na popotovanje skozi človekovo notranjost. Obiskovalec spozna sprva nezavedna stanja izvajalcev, ki jih predstavljajo notranji konflikti in razrešitev le-teh skozi obstoj. Ob prepletanju različnih vtisov, ki jih ustvari vstopanje v posamezne prostore, se predstava dotika tako osebnih dilem in strahov kot moči posameznika in s tem oriše celovitost njegovega bitja.

V predstavi se pojavljajo motivi izmenjevanja trenutnega prostora in časa z idealističnim, ki človeka postavi pred spoznanje druge realnosti. Potovanje po prostorih sovpada z doživljanjem in razumevanjem svobode bivanja posameznika.

V svetu, v katerega je povabljen gledalec, se tri individualne osebnosti prelivajo v eno homogeno zavest.

The dance performance FOR YOU invites the viewer to travel through the human interior. The visitor encounters the initially unconscious states of performers manifested by internal conflicts and their resolution through existence. Various intertwining impressions created by entering individual spaces touch on personal dilemmas and fears as well as the strength of the individual, thus outlining the integrity of the individual's being.

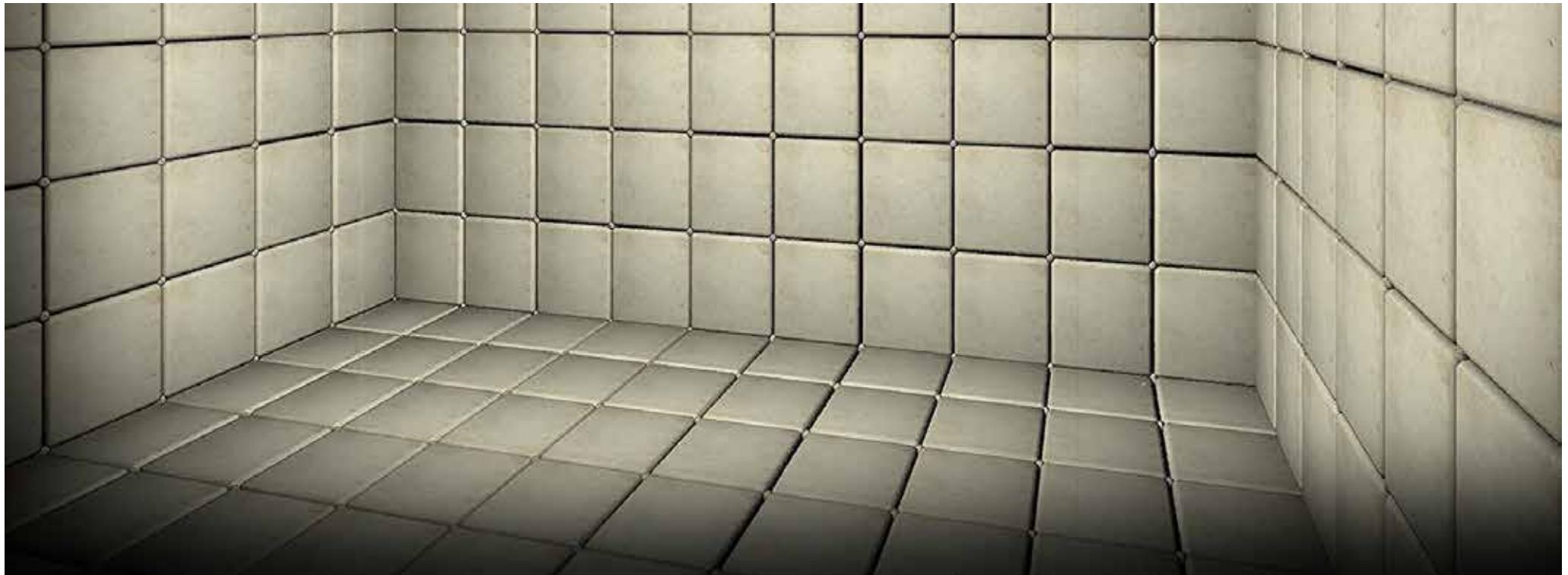
The performance presents the motives of exchanging the current space and time with the idealistic one, which confronts a person with encountering another reality. Travelling through spaces coincides with the experience and understanding of an individual's freedom of being. In the world to which the viewer is invited, three individual personalities melt into a single homogenous conscience.

## Kristina Tica (RS) - Iztočnica: vojne zgodbe / Prompt: War stories



Projekt je bil razvit s pomočjo različnih prednastavljenih modelov, ki pretvarjajo besedilo v sliko in procesirajo vnose besednih iztočnic. Na meji med občutljivimi temami in le korak stran od tem nasilja projekt vizualizira globine nezavednosti teh modelov ter izkopava vplive medijev in spletnne izmenjave informacij. Kvantificirani drobci realnosti in skupne zgodovine omogočajo algoritmom, da ustvarjajo vsebino, ki reciklira preteklost – gradi hrbitišče kvazizgodovinske narative, ki je pogosto pomešana s predsodki in zavajajočimi informacijami ter avtoričnimi osebnimi predsodki. Ustvarjeni izdelki so predstavljeni znotraj hipertekstovnega objekta – šotorja, v katerega lahko občinstvo vstopi.

The project is developed using various pre-trained text-to-image models, processing text prompt inputs. On the borderline between sensitive content and an easy slip into topics of violence, this project visualizes the depths of the subconscious of these models, excavating the influences of media and online information exchange. The quantified traces of reality and collective histories allow algorithms to generate content that recycles the past - building the spine of quasi-historical narratives—often obfuscated with prejudice and misinformation, along with the author’s personal bias. Generated outputs are presented inside a hypertext object—a tent, that the audience can enter.



S poplavu lažnih novic in najrazličnejših teorij zarot, ki smo jih dnevno deležni na socialnih omrežjih, se avtorji sprašujemo, ali je dvom, ki ga je Descartes postavil za temeljno premiso človekovega obstoja in pravzaprav edini dokaz, da »ergo sum«, sploh še aktualen kot racionalno sredstvo nekega razumevanja ali pa smo prišli do točke, kjer nam »resnico« prodajajo in podarjajo samo še mediji, politične stranke, aktivisti in drugi motiviranci. Ali imamo »navadni« ljudje res zvezane roke? Ali smo samo še opazovalci sveta, katerega del naj bi bili in ga tudi pomagali soustvarjati? Ali pa smo le še nemi opazovalci, zaprti v mehurčke, institucionalizirani ter zvezzani v prisilne jopiče, ki nam jih nočejo odstraniti?

With the floods of fake news and various conspiracy theories noted daily in our social media feeds, we the authors question, whether the doubt put forth by Descartes as the basic premise of man's existence and indeed the only proof that "ergo sum", is even still actual as a rational mean of understanding; or whether we have reached a point where the truth is handed over to us by only media, political parties, activists or other people with a motive? Do we "the ordinary" people really have our hands tied? Are we but observers of the world of which we are supposed to be a part of, and which we are supposed to co-create? Or are we only the silent observers, enclosed in bubbles, institutionalized and constrained in straight jackets which they refuse to remove from us?

## Prostetični 3. del - Brez vpliva / Prosthetic Vol. 3 – Zero Agency



Prostetični paviljon 3. del je bil v začetku vzpostavljen kot spletna kuratorska platforma petega dela bienala The Wrong. Ambasada/paviljon je združil umetnike s celega sveta. Kot nakazuje samo ime platforme / brez vpliva /, je rast platformine estetike in vsebine mnogokrat spremenila obliko, popolnoma odprta za intervencije sodelujočih. Povzetek te platforme bo sedaj prenesen v fizični prostor. Namen projekta je ustvariti fizično imerzivno okolje, skozi katerega se je mogoče premikati kot po labirintu po prostorih ambasade od videa, zvoka in slike do virtualnih vsebin; od hiperteksta in virtualnega x-y-z do urejenega prostorskega in utelešenega izkustva. Paviljon se razteza čez dve ločeni sobi (hiper zabava brez toleranc in brez vpliva), ki sta povezani s portalom za vdiranje.

Izbor: Darko Vukić

Sodelujoči umetniki: H C-(M), Tica Kristina, Ob, Kevin Blackstone, Sava Zolog, Nina Mihaljinac, Ráhel Anna Molnár, Mate Elod Janky, Sara Koniarek, Barbara Jazbec (... in drugi)

Prosthetic pavilion Vol.3 is initially established as an online curatorial platform of the 5th edition of The Wrong Biennial. The embassy / pavilion has brought together artists from around the world.

As the platform title /zero agency/ insinuates, rhizome-networked growth of the platform's aesthetics and content has changed many shapes and forms, completely open to participant's interventions. The summary of it will now be translated into a physical space.

The aim is to create a physical immersive environment of labyrinth-like movement throughout the embassy space, from video, sound, and image to VR /360content - from hypertext and virtual x-y-z - to a curated spatial, and embodied experience. Pavilion spreads throughout two separate rooms (no tolerance hyper party, and 0 agency) connected via portal for trespassing.

Curated by: Darko Vukić.

Participating Artists: H C-(M), Tica Kristina, Ob, Kevin Blackstone, Sava Zolog, Nina Mihaljinac, Ráhel Anna Molnár, Mate Elod Janky, Sara Koniarek, Barbara Jazbec (...and more)

## Razieh Kooshki (IR) and Vahid Qaderi (IR): Med vozlišči / In Between Nodes



"Edina realnost je obstoj."

Dvomi o realnosti, v kateri živimo, so vedno bili in vedno bodo. Gre za resničnost, zgolj za sanje ali za ustvarjen virtualni prostor? Tudi če nekdo pride in nas odpelje v resnični svet s tem, ko nam ponudi slavno rdečo tabletko, lahko dvomimo tudi v ta svet. Je ta svet končno resničen? Ali je zgolj še en ustvarjen prostor? In kaj če ustvarimo resničnost? Kaj če ustvarimo resničnost znotraj virtualne realnosti, ki leži v še eni virtualni realnosti ... Koliko ustvarjenih svetov moramo prečkati preden dosežemo resničnost? V tem projektu virtualne resničnosti so avtorji ustvarili paralelne virtualne prostore. Uporabniki se lahko premikajo v katerikoli sceni, vplivajo na nekatere objekte in zvoke ter se premaknejo v drugo sceno s pomočjo očal za virtualno resničnost, ki se nahajajo v vsaki sceni, in tako odkrijejo nov svet.

«The only reality is existence»

There have always been and there will always be doubts about the reality of the world we live in. Is it real or is it just a dream, or a designed virtual space? Even if someone comes and leads us to the real world by offering the famous red pill, we can still question that world too. Is that one finally real? Or is it another designed space? And what if we design reality? What if we design a reality within a virtual reality that lies inside another virtual reality...? How many designed worlds do we need to cross to finally reach reality? In this VR project the artists designed parallel virtual spaces. Users can move in any scene and interact with some objects and sounds and move to another scene using the virtual VR headset located in each scene and discover a new world.

## Izbor video del

### Univerza v Novi Gorici Akademija umetnosti (SI)

Akademija umetnosti Univerza v Novi Gorici se osredotoča na razvoj avtoric in avtorjev, ki ustvarajo v različnih umetnostnih poljih in medijih – film, animacija, fotografija, novi mediji, sodobne umetniške prakse in različne povezave med njimi. Za interdisciplinarno in intermedijsko naravnost izrazito praktičnega študija v kakovostnem akademskem okolju skrbi bogat nabor strokovnih sodelavcev in gostujočih mentorjev. Študentke in študentje so ob raznolikih možnostih mobilnosti vključeni v projekte in sodelovanja tako z lokalno skupnostjo kot s širšim mednarodnim družbenim okoljem, kar jim študij ob stičišču z italijansko skupnostjo omogoča še toliko bolj.

University of Nova Gorica School of Arts focuses on the development of authors, savvy in several complementary artistic fields and media – film, animation, photography, new media, contemporary art practices and hybrid connections between them. The interdisciplinary and intermedia features of these explicitly practical study programmes delivered in a quality academic environment are guaranteed by a rich pallet of referenced collaborators and visiting mentors. With various mobility options, students are involved in projects and collaborations both with the local community and with the wider international social environment, which makes studying at the junction with the Italian community all the more possible.

#### **Video dela / Videos:**

Miha Reja - Kurent (2021) - 6 min 54s

Milena Brkić - Meaning Experimental / Meniti eksperimentalno (2022) - 7 min 36s

Sagar Gahatraj - In the nation of the car lovers / Dežela ljubiteljev avtomobilov (2022) - 29 min 47s

Arta Kroni - Zbulimi / Uncovering / Odstiranje (2022) - 6 min 48s

Nika Karner - Naglodane kosti / A bone to pick with (2022) - 3 min 38s

Blaž Štolar - Gostja / The Guest (2022) - 23 min

Boris T. Matić - Četrvtak / Thursday (2022) - 12 min 55s

### TAMK - Tampere University of Applied Sciences School of Business and Media (FI)

Video dela so bila izdelana med študijskim modulom Moving Images (Premikajoče slike) spomladi 2022. Študijski modul je del kurikuluma umetniške smeri diplomskega programa Mediji in umetnost. TAMK – Univerza praktičnih znanosti Tampere je polnopravna članica univerzitetne skupnosti Tampere na Finskem. V naših umetniških študijah je poudarjena sodobna umetnost in tehnologije v razvoju. Avtorji teh video del so študenti prvega letnika umetniške smeri in študenti na izmenjavi. Namen je bil preko ustvarjenih kratkih video del raziskati prakso premičnih slik v kontekstu sodobne umetnosti.

The video works were produced during the Moving Image study module in Spring 2022. The study module is part of the Fine Arts study path's curriculum of Degree Programme in Media and Arts. TAMK – Tampere University of Applied Sciences is a full member of Tampere Universities community in Finland. In our art studies the emphasis is put on contemporary art and emerging technologies. The authors of these video works are fine art first year-, and exchange students. The aim was to explore the practice of moving image within contemporary fine art context creating a short video work.  
(Fanni Niemi-Junkola, Team Leader, Fine Art, D.P. in Media and Arts)

#### **Video dela / Videos:**

Sami Sakari - Fire / Ogenj (2021) - 4 min 54 s

Mika Yli-Mäyry - Dire / Hudo (2021) - 3 min 8 s

Jan Pitkäsalo, Victoria Fofanova, Robert Eftychiou, Halla Hannelin - The Long Way Home / Dolga pot domov (2022) - 5 min 18 s

Maria Zapf, Ailandas Legačinskas, Jonna Lehtomaa - Zeal / Vnema (2022) - 1 min

Saara Kankare - The Man in The Attic / Moški na podstrešju (2022) - 2 min 57 s

Labib, Michèle-Nay Meaiki, Jerónimo Pereira - Sarah's Cycle / Sarin cikel(2022) - 5 min

Jonna Lehtomaa - Hauras / Fragile / Lomljivo (2022) - 4 min 8 s

Chanbi Kim - Philantropy / Filantropija (2022) - 3 min 27 s

Jonna Lehtomaa - Exhale / Izdih (2021) - 2 min 34 s

Irina Kinko, Pihla Paju - Melting / Topljenje (2022) - 2 min 24 s

Saara Kankare, Iris Manner, Chanbi Kim - Reflection / Odsev (2022) - 2 min 45 s

Megan Wearen, Hayoung Lee, Jacqueline Stähle - Floating / Lebdenje (2022) - 2 min 9 s

Sami Sakari - Virtual Corporeality / Virtualna telesnost(2022) - 5 min 36 s

## Izbor video del

### Naravoslovnotehniška fakulteta - Informacijske in grafične tehnologije (SI) Miheličeva dialoškost / Miheličeva dialoškost

V letu 2022 mineva 120 let od rojstva Mire Mihelič, ki je del svojega otroštva preživelata tudi v Trbovljah. Projekti študentov so gradili štiri umetniške prakse slovenskih umetnikov: grafične odtise Franceta Miheliča, literarna dela Mire Mihelič, glasbeno virtuoznost Larise Vrhunc in kiparsko gesto Borisa Beje. Preplet vseh štirih umetniških govoric so študentje ujeli v videu dokumentu, ki na nek način odgovarja na modernistično preteklost s sedanjo sočasnostjo dveh umetnikov. Njihov narativ se prepleta v podobah kurentov. Mitološka bitja, kot prevod Miheličevih odtisov in vtisov v kiparsko formo, so sodobni Fausti, ali pa v njih uzremo Perkmandeljca, ki je s svojo senco stoletja buril domišljijo in strahove v revirske lokalne skupnosti.

Dela so pripravili: Darja Petrič, Jaka Mušič, Jernej Kalin, Jure Klokočovnik, Mark Breznik, Nina Štanfel, Tara Semečnik. Mentor: Boris Beja

In 2022 it will have been 120 years since the birth of Mira Mihelič, who spent a portion of her childhood in Trbovlje. The student projects were built through four art practices of Slovenian Artists. Graphics prints of France Mihelič, the literary works of Mira Mihelič, the musical virtuosity of Larisa Vrhunc and the sculpting gestures of Boris Beja. The students captured the mingling of all four dialects of art in a video documentary, which in a way responds to the modernist past with concurrence of two artists. Their narratives intermingle in the image of the Kurent. Mythological beings as a translation of the Mihelič prints and imprints into the sculpting forms; they are the modern day Fausts. Alternatively we can gaze within them the Perkmandeljc, who with its shadow has fueled the imagination and fears within the local community of the region.

Video works have been created by : Darja Petrič, Jaka Mušič, Jernej Kalin, Jure Klokočovnik, Mark Breznik, Nina Štanfel, Tara Semečnik. Mentor: Boris Beja

### Društvo slovenskih animatorjev - kompilacija / compilation

#### Serija tako zraste:

1. Tako zraste ... Metulj
2. Tako zraste ... Žaba
3. Tako zraste ... Polž
4. Tako zraste ... Netopir
5. Tako zraste ... Petelin
6. Tako zraste ... Riba

#### Družinske zgodbe

1. Miloš Tomić - Ta presneta očetova kamera!  
Slovenija, 2021, 7'
2. Dušan Kastelic - Čikorja an' kafe  
Slovenija, 2008, 8'
3. Katarina Nikolov - Povodni mož  
Slovenija, 2020, 12'
4. Leon Vidmar - Slovo  
Slovenija, 2016, 6'

#### Maček Muri

1. Rojstni dan
2. Sprehod
3. Kosilo
4. Tekma



**Speculum Artium 2022**

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Kuratorji / Curators: Špela Pavli Perko, M.A., Bogdan Šteh, M.A., Andrej Uduč, Barbara Jazbec

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Spletna stran / website:

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

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

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

Naklada / Print run: 300

Trbovlje, 2022

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