

# World Upstream

Cezar Mocan, August 2024



World Upstream is an inquiry into the aesthetics of leisure. Set in a fictional future which takes for granted the embodiment of artificial intelligence - and with it, the fulfilled techno-utopian promise of freedom through automation - World Upstream asks what remains once labor becomes obsolete.

The setting is a strange picnic. A cast of characters - including a wise poplar tree, a group of quadruplets, or a Dyson vacuum, all equipped with artificial minds -, become equal-parts shareholders in re-wilding an ageing piece of infrastructure: a hydroelectric dam on its path towards obsolescence.

World Upstream exists as a live simulation constructed in a game engine, and it presents as a film which edits itself in real time. The storytelling techniques of traditional cinema are replaced by emergent behaviors, as the conjunction of camera movement, character action and environment design leads to the unfolding of proto-narratives: snippets of action and intentionality which live somewhere between the screen and the viewer's imagination.

The simulated nature of the work also means that the picnic never ends. As long as the GPU fans are spinning and the electricity is flowing, its characters are doomed to continue producing their performative labor of leisure.

World Upstream este o cercetare a esteticii timpului liber. Amplasată într-un viitor fictiv care dă ca sigură personificarea inteligenței artificiale - și, odată cu ea, promisiunea tehnico-utopică a libertății prin automatizare - World Upstream se întreabă ce rămâne după ce munca devine neesentială.

Decorul este un picnic ciudat. O distribuție de personaje - inclusiv un plop în-telet, un grup de cvadrupleti, sau un aspirator Dyson, toate echipate cu minti artificiale -, devin coautori în revendicarea unei infrastructuri îmbătrânite: un baraj hidroelectric aflat pe drumul spre obsolescentă.

World Upstream există ca software construit într-un motor grafic și se prezintă ca un film care se editează în timp real, fără sfârșit. Aspectul de simulare în timp real îmbogățește explorarea tematică a lucrării: tehniciile de povestire vizuală ale cinematografiei traditionale sunt înlocuite de comportamente emergente. Conjunctionia procedurală dintre mișcările camerei, interacțiunea personajelor și designul decorului duce la desfășurarea unor "proto-naratiuni": fragmente dinamice de acțiune și intenționalitate fără rezultate predeterminate, ce duc la apariția unui ecosistem în devenire constantă.

You can watch a short (7min) preview of the World Upstream software here: <https://vimeo.com/925331203>.

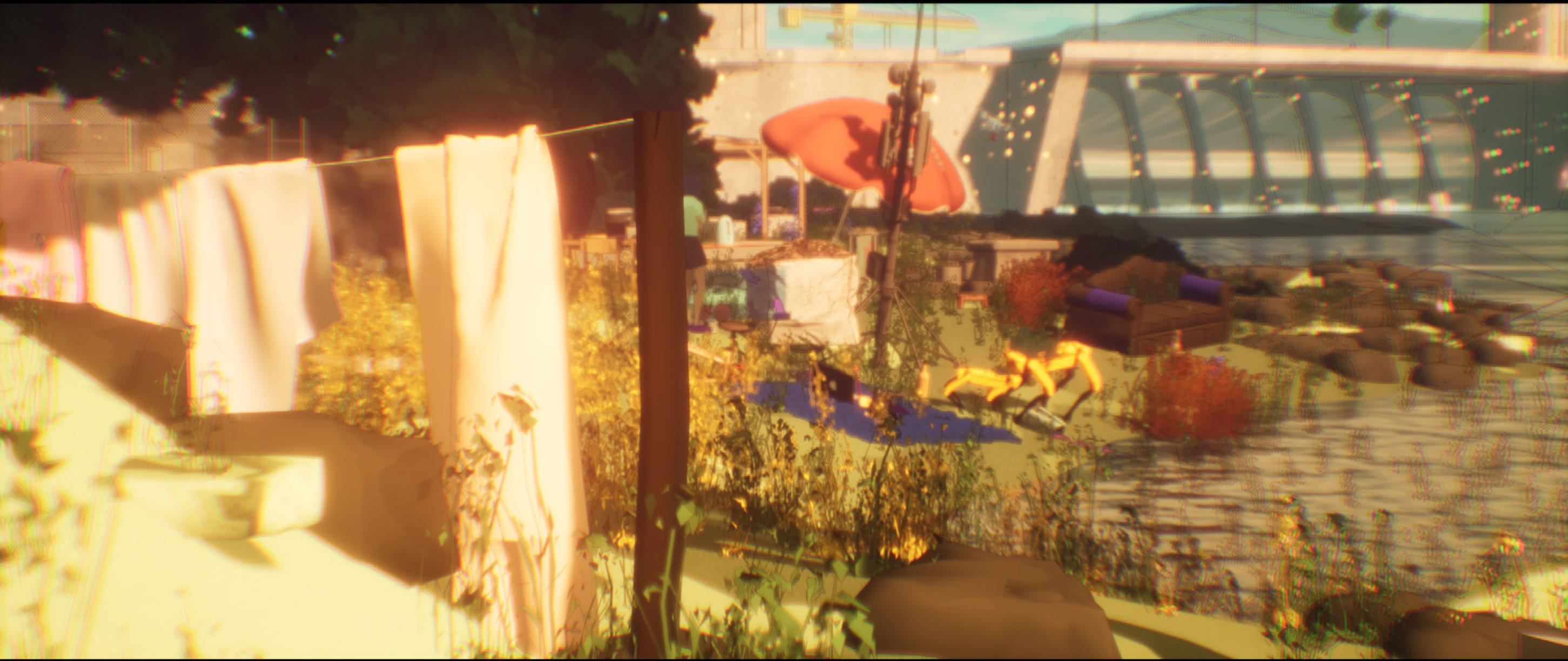
The rest of this document contains further still images and information about the work, as well as technical details and exhibition documentation.  
You can find an bio and CV on the second-to-last page.











The setting, a timeless gathering upstream of a once-majestic dam, points to the nostalgia of a bygone era; The dam is a relic of 20th-century nation building ambitions and progress, and a quiet nudge to ponder the future of today's technological marvels. It invites reflection on the progression of technologies from the peak of their hype cycles towards latter stages of mass adoption and eventual obsolescence.

Media archaeologist Jussi Parikka proposes the concept of “zombie media”: an acknowledgement of the fact that electronic waste never fully disappears, but rather remains entangled with natural processes, as a “living dead”. The final part of technology’s life cycle thus becomes a moment of celebration: a time when technology can be reclaimed by communities and ecosystems.

Following this argument, the dam in World Upstream is a piece of “zombie infrastructure”, reclaimed by a slow, emergent, anti-productive process, led by a symbiosis between AI and “nature”.

Cadrul, o adunare atemporală în amonte de un baraj cândva maiestuos, indică nostalgia unei epoci trecute; barajul este o relică a ambiciilor și progresului din secolul XX în construirea națiunilor și un îndemn liniștit la reflectie asupra viitorului minunilor tehnologice de astăzi. El invită la reflectie asupra progresia tehnologilor de la apogeul ciclurilor lor de hype către ultimele etape de adoptare în masă și eventuala lor obsolescentă.

Arheologul media Jussi Parikka propune conceptul de “media zombi”: o recunoaștere a faptului că deșeurile electronice nu dispar niciodată complet, ci mai degrabă rămân integrate în procesele naturale, ca un “mort viu”. Partea finală a ciclului de viață al tehnologiei devine astfel un moment de sărbătoare: un moment în care tehnologia poate fi recuperată (“reclaimed”) de comunități și ecosisteme.

Conform acestui argument, barajul din World Upstream este o “infrastructură zombi”, recuperată printr-un proces lent, emergent, antiproductiv, condus de o simbioză între inteligența artificială și “natură”.

















The inhabitants of World Upstream, whether living beings, inanimate objects or elements of infrastructure are driven by an artificial intelligence system: a cognitive architecture rooted in five different desires each character tries to fulfill through their actions in the virtual environment.

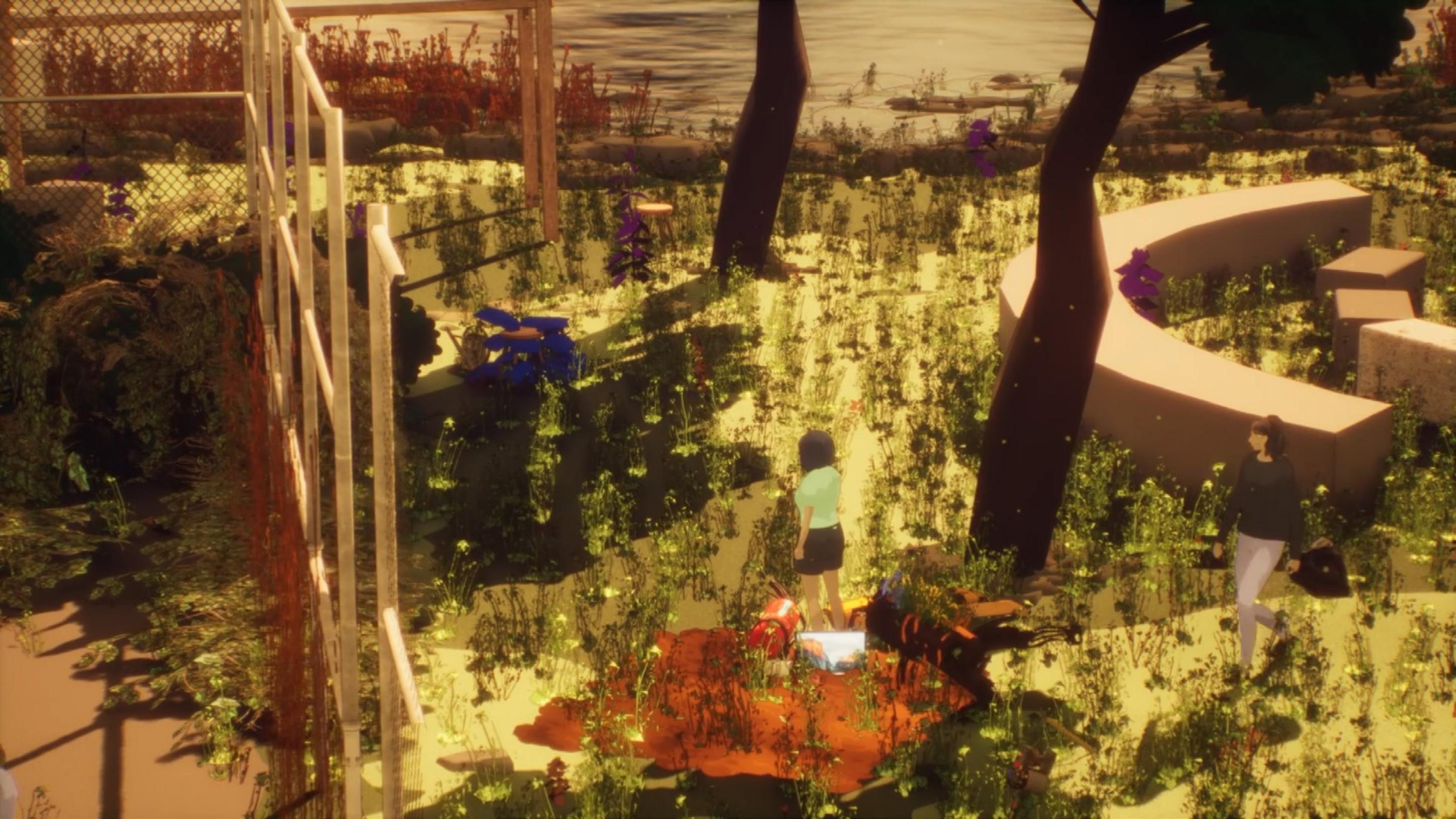
This set of five desires - nostalgia, nesting, curiosity, cacophony and togetherness - transcends regular physiological needs, standing as a proposition to consider embodied artificially intelligent beings in a non-productive, post-capitalist context. Each AI's *umwelt* is mediated by the landscape, rather than the server farm, driven by a sense of slowness and playfulness.

There is a certain naïvité in World Upstream: in the visual language, in the cognitive architecture behind each character. While it may seem like a utopian dream, it also stands as a question mark: is there space for being slow and playful in a world crying out for urgent solutions?

Participantii din World Upstream, fie că sunt fiinte vii, obiecte neînsufletite sau elemente de infrastructură, sunt conduși de un sistem de inteligență artificială: o arhitectură cognitivă bazată pe cinci dorinte / nevoi diferite pe care fiecare personaj încearcă să le îndeplinească prin acțiunile sale în mediul virtual.

Acest set de cinci dorinte - nostalgie, cuibărire (nesting), curiozitate, cacofonie și unitate - transcende nevoile fiziole obișnuite, reprezentând o propunere de a considera inteligența artificială într-un context post-capitalist, neproductiv. Umwelt-ul inteligenței artificiale este mediat de peisaj, mai degrabă decât de ferma de servere, condus de un sentiment de lentoare și de joacă.

Există o anumită naivitate în World Upstream: în limbajul vizual, în arhitectura cognitivă din spatele fiecărui personaj. Deși poate părea un vis utopic, este, de asemenea, un semn de întrebare: există spațiu pentru a fi lent și ludic într-o lume care cere soluții urgente?















During the research phase of this work I encountered Anna Tsing's "Arts of Living on a Damaged Planet", which introduces this re-framing of a "ghost" as a past that could have been, as ecosystems and entities that are no more, but live through in material or immaterial ways. It's been deeply influential in the way I think about world building, in the context of World Upstream and my practice at large, so I leave you with her words:

*As humans shape the landscape, we forget what was there before.*

*Ecologists call this forgetting the 'shifting baseline syndrome'.*

*Our newly shaped and ruined landscapes become the new reality.*

*Admiring one landscape and its biological entanglements often entails forgetting many others.*

*Forgetting, in itself, remakes landscapes,  
as we privilege some assemblages over  
others.*

*Yet, ghosts remind us.*

În timpul stadiului de cercetare a acestei lucrări am descoperit cartea "Arts of Living on a Damaged Planet" a Annei Tsing, care introduce această reîncadrare a "fantomei" ca un trecut care ar putea fi fost, ca ecosisteme și entități care nu mai sunt, dar care trăiesc în moduri materiale sau imateriale. A avut o influență profundă asupra modului în care mă gândesc la construirea lumii, în contextul World Upstream și al practiciei mele în general, așa că vă las cu cuvintele ei:

*Pe măsură ce oamenii modelează peisajul, uităm ce a existat înainte.*

*Ecologii numesc această uitare "sindromul schimbării liniei de bază".*

*Peisajele noastre nou modelate și distruse devin noua realitate.*

*Admirarea unui peisaj și a conexiunilor sale ecologice implica adesea uitarea multor altora.*

*Uitarea, în sine, reface peisajele,  
pe măsură ce privilegiem anumite ansambluri în detrimentul altora.*

*Cu toate acestea, fantomele ne reamintesc.*

*(traducere aproximativă)*









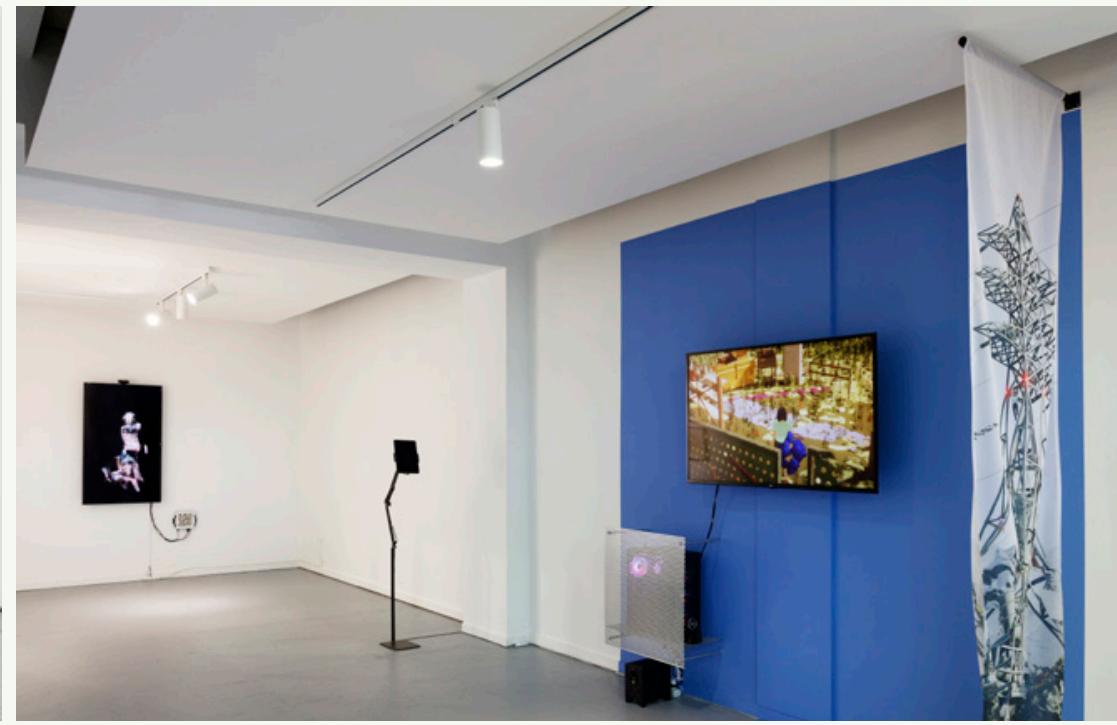








# World Upstream, Exhibition View



World Upstream, 2023-2024  
real-time simulation, sound  
images courtesy of Office Impart (Berlin) and  
Artemis Gallery (Lisbon)



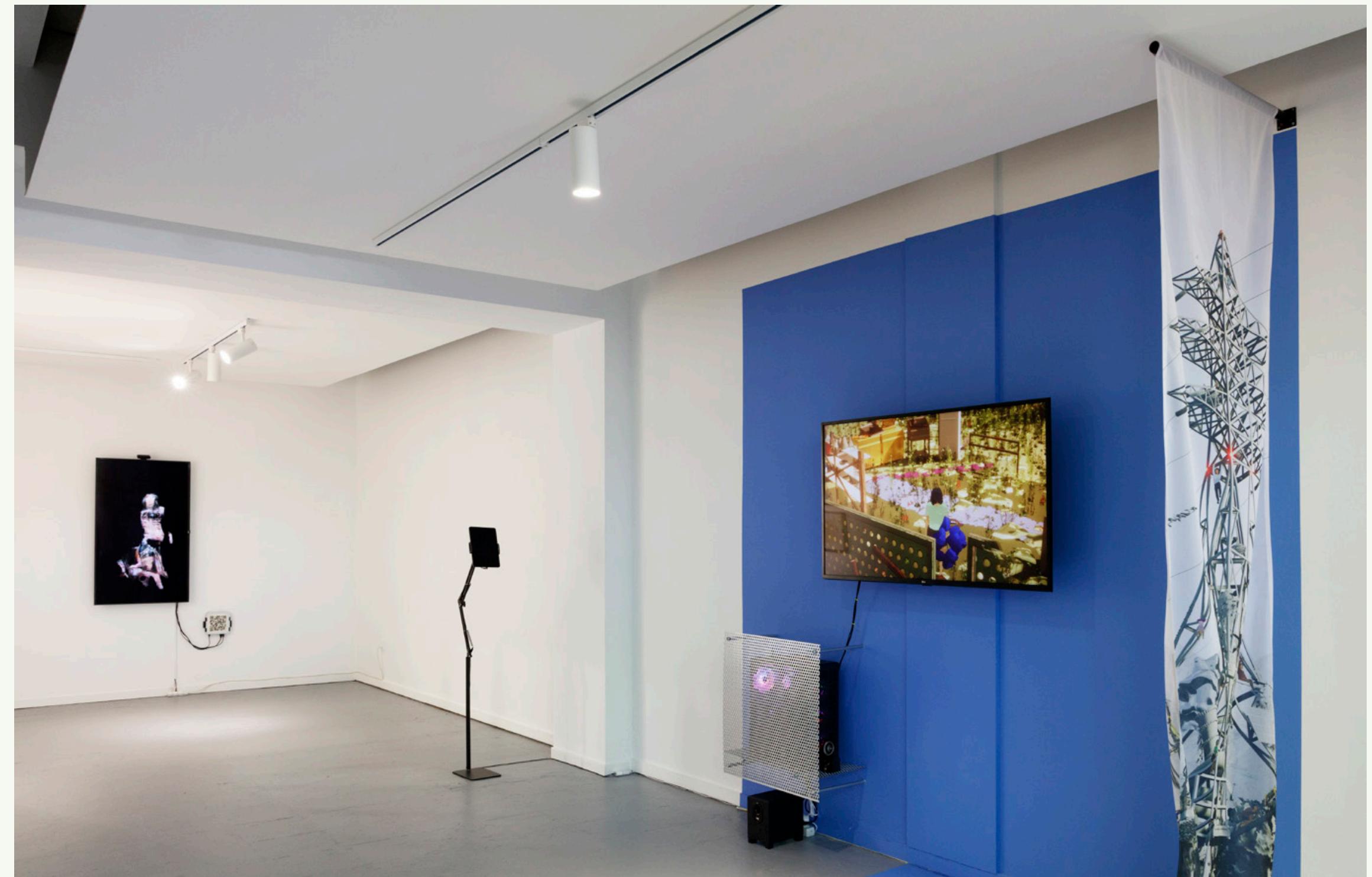
## World Upstream, Exhibition View



World Upstream, 2023-2024  
real-time simulation, sound  
image courtesy of Office Impart (Berlin)



# World Upstream, Exhibition View

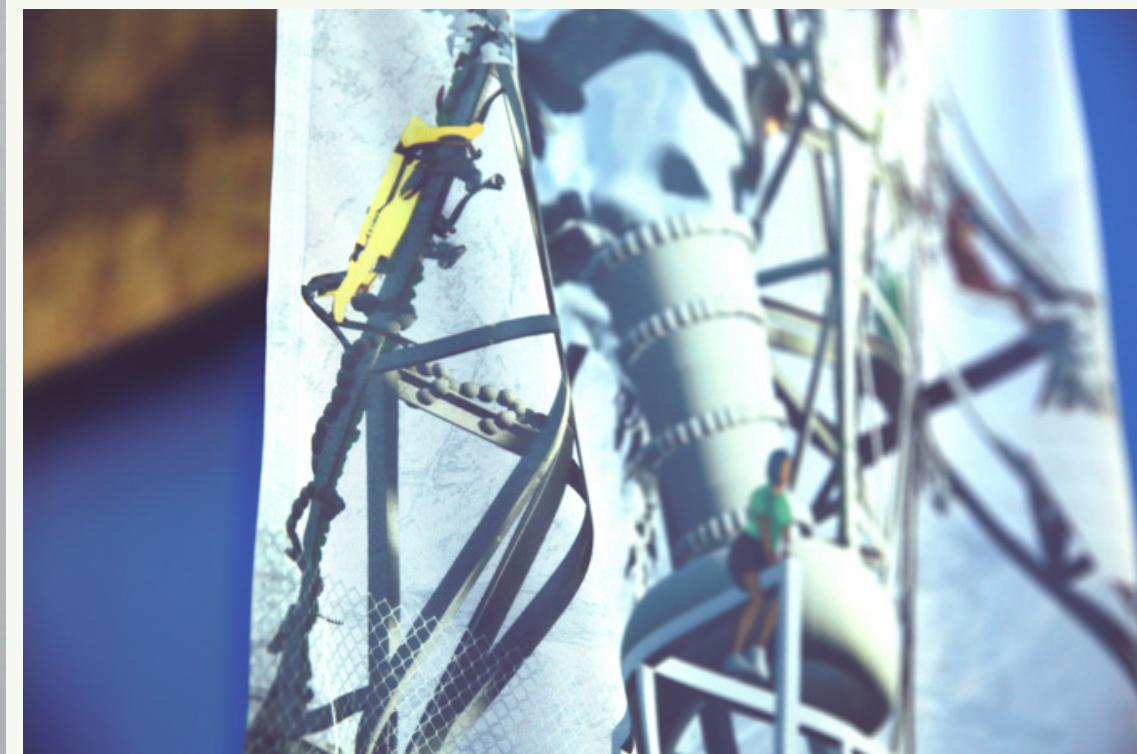


World Upstream, 2023-2024  
real-time simulation, sound  
image courtesy of Artemis Gallery (Lisbon)



World Upstream, 2023-2024  
real-time simulation, sound  
image courtesy of Artemis Gallery (Lisbon)

## World Upstream, Exhibition View



*The World Upstream (Stood Still) #2, 2024  
dye sublimation on fabric  
280cm x 70cm  
images courtesy of Artemis Gallery, Lisbon*

# World Upstream, Technical Specifications and Install Format

Year: 2023-2024

Medium: live simulation

## Collaborators:

Christina Lan (sound),  
Olivia Yin (world design)

## Exhibitions:

Sandbox Mode at Office Impart (Berlin)

Beyond Human at Artemis Gallery (Lisbon)

The Wrong Biennale 06 (online)

Reverse Tar Pit at Onassis ONX Studio (New York)

Reverse Tar Pit: Sludge Room at Brooklyn Art Cluster (New York)

Tellurian Traversals at Putty's Coronation Gallery (New York)

## Details

World Upstream is a simulated, non-interactive digital ecosystem delivered as a .exe software (like a computer game.) It runs in real time as a single-channel video of infinite duration, in an aspect ratio of 21:9 (projection presentation) or 16:9 (screen presentation.)

The minimum technical requirements for displaying the work are a projector or screen, a Windows gaming PC with a recent graphics card (NVIDIA RTX 3060 or equivalent) and speakers. The artist can provide an appropriate computer for running the simulation for the duration of the exhibition.

The presentation should always include the PC running the simulation as a part of the physical installation, as well as exposed cabling.

## Projection Presentation (Preferred)

World Upstream can be shown as a wide-screen, 21:9 aspect ratio projection.

The projection screen can exist either as a hanging panel (Option 1) or as a panel attached to a wall (Option 2). The projection screen dimensions should be a minimum of 3m wide x 1.28m tall. For Option 2, the work should never be projected directly on a wall - if projecting on a panel is not an option, the screen presentation is preferred.

The projection presentation requires a dark space.

The projector should be masked in the 21:9 aspect ratio, in order to prevent light bleed coming from the black letterbox.

## Screen Presentation

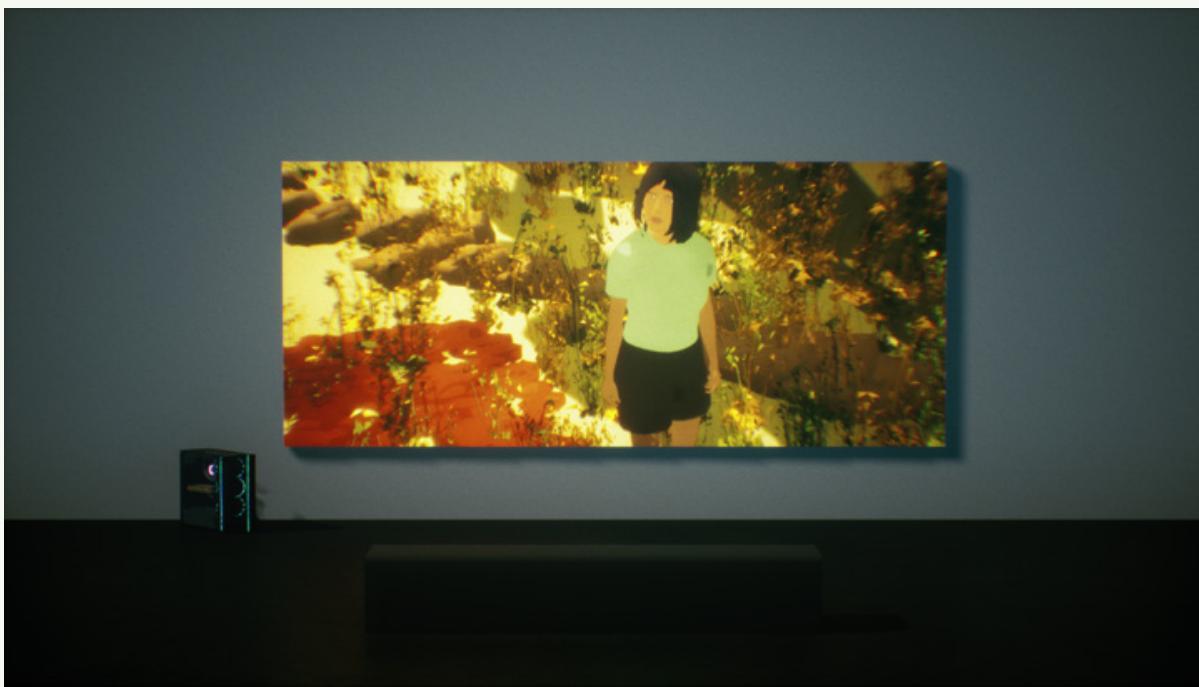
If the provided space is not suitable for a projection, World Upstream can be exhibited on a screen in a 16:9 aspect ratio. Previous examples of the screen presentation in a gallery context can be seen on the Exhibition View pages of this document.

The screen diagonal size should be at least 127cm (50in.) The screen should be mounted on a wall, pole, standardazied stand or custom-made stand, depending on venue and budget.

The PC running the simulation should be a visible part of the installation, in the vicinity of the monitor, and cabling should be exposed. The exact install format can vary based on the venue.



Projection presentation: Option 1 mock-up



Projection presentation: Option 2 mock-up

# World Upstream, Software Details

Year: 2023-2024

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Registration

The World Upstream software needs to be registered in order to run without a watermark. The artist issues unique access codes for collectors, as well as exhibition copies. The software can be registered by opening the Control Panel (Shift + C), writing the access code in the Registration section, and clicking Authenticate.

Aspect Ratio, Graphics Quality

The Render Settings section of the Control Panel allows for adjustments in the graphics quality as well as the presentation format. The software aspect ratio, resolution and frame rate can be adjusted here.

Game Console (Advanced)

In rare circumstances, more advanced performance or graphics quality tweaks need to be made in order to ensure the proper display of World Upstream. For that reason, the software exposes the Unreal Engine in-game console, which allows granular adjustments for quality and performance settings.



World Upstream Control Panel

# Cezar Mocan, Personal Information

## Bio

Cezar Mocan is a Lisbon-based artist and computer programmer interested in the interplay between technology and the natural landscape. Using narrative generative systems—animated videos of infinite duration, real-time simulations built in game engines or other software—he creates worlds that recontextualize aspects of digital culture we take for granted, often in absurd ways, while investigating the power structures which mediate our relationship with technology. He is interested in the built infrastructures which enable our digital lives, as well as the ways in which their presence in the natural landscape affects our perception: the moments when utility becomes nostalgia. Drawing on media archaeology and art history, his research process traces the origins of our current thought patterns around (technological) progress.

Some of his past works have been exhibited with Inter/Access (Toronto), Transmediale Vorspiel (Berlin), Office Impart (Berlin), Onassis ONX Studio (New York), Currents New Media (Santa Fe), Romanian Design Week (Bucharest) and The Wrong Biennale. His real-time simulation work, Arcadia Inc. was recognized as a 2021 winner of the Lumen Prize in Art and Technology. Cezar holds a B.S. in Computer Science (2016) from Yale University and an M.P.S. in New Media Art (2021) from New York University, where he also served as a research resident and adjunct professor.

## Education

2019 - 2021 M.P.S. New Media Art (ITP), New York University  
2012 - 2016 B.S. Computer Science, Yale University

## Exhibitions (selection)

upcoming *Octobre Numerique: Faire Monde* • Fabbula, curated by Vincent Moulinet • Arles, France  
upcoming *Matrix of the Not-Yet* • Underground Art and Design, curated by Amy Jiang • online  
2024 *Beyond Human* • Artemis Gallery, curated by Kirsten Eggers and Manuel Mendonca • Lisbon  
2024 *Arcadia Inc. (solo)* • Panke Gallery /rosa, part of Transmediale Vorspiel, curated by Robert Sakrowski • Berlin  
2023 *Sandbox Mode* • Office Impart, curated by Office Impart, Stina Gustaffson and Maria Paula Fernandez • Berlin  
2023 *Reverse Tar Pit* • Onassis ONX Studio, curated by Mark Ramos, Don Hanson & Sammie Veeler • New York  
2023 *Desktop Studies* • CAV Gallery, curated by Spam Index • Bucharest  
2023 *The Wrong Biennale 06* • online  
2023 *Tellurian Traversals* • Putty's Coronation Gallery, curated by David Temchulla • New York  
2023 *Media Art Festival Arad x Ready Media* • Museum of Art Arad, curated by kinema.ikon • Arad, Romania  
2023 *Romanian Design Week* • curated by The Institute • Bucharest  
2023 *GUI / GOOEY* • Plexus Projects, curated by Laura Splan • online & New York  
2022 *Dynamic Links* • www.spam-index.com, curated by Nico Mures • online  
2022 *Lumen Prize x Infinite Objects* collection  
2022 *Scripting* • theBlanc Gallery, curated by Elvin Ou and Morgan Mueller • New York  
2022 *Currents New Media* • Center for Contemporary Art • Santa Fe  
2022 *Kampüste Dijital Sanat* • Akbank Sanat, curated by Ali Kerem Bilge • Istanbul  
2022 *Sculpted in Our Image, Forged in Our Minds* • Inter/Access, curated by Tristan Sauer • online & Toronto  
2021 *Soft Power (solo)* • SPRING/BREAK Art Show, curated by Lizzy Chiappini • New York  
2021 *Anywhere but Here* • The Canvas Bowery, curated by Slow Burn Collective • New York  
2021 *Lumen Prize for Art and Technology* • Student Award • London

## Teaching (selection)

2022 Adjunct Professor, *Networked Media*, New York University Interactive Media Arts  
2022 Guest Speaker, *Visualization and Computation*, Yale School of Architecture  
2022 Guest Speaker, *100 Days of Making*, New York University Interactive Telecommunications Program  
2022 Guest Critic, *Synthetic Architectures*, New York University Interactive Media Arts  
2021 Guest Critic, *Visualization and Computation*, Yale School of Architecture  
2021 Guest Critic, *Networked Media*, New York University Interactive Media Arts  
2021 Curriculum Developer & Teacher, *Points, Lines and Systems*, School of Machines, Making & Make-Believe  
2021 Curriculum Developer & Teacher, *Programming the Net*, Upgrade Education

## Residencies, Publications, Talks

2024 *Antikythera Cognitive Infrastructures Studio* • residency • London  
2023 *Tracing the Line* • published by Vetro Editions in collaboration with Generative Hut • publication • Berlin  
2023 *VCA Residency* • residency • online  
2021 - 2022 *Research Residency at New York University's Interactive Telecommunications Program* • residency • New York  
2021 *What Does the Desktop Want?* • for the Computer Mouse Conference 2021, hosted by CultureHub • talk • New York

# Cezar Mocan, Informatii Personale

## Bio

Cezar Mocan este artist și programator stabilit la Lisabona. Cezar este interesat de interacțiunea dintre tehnologie și peisajul natural. Folosind sisteme narrative generative - animatii de durată infinită, simulări în timp real construite în motoare grafice sau alte programe - el creează lumi care recontextualizează aspecte ale culturii digitale pe care le considerăm de la sine înțelese, adesea în moduri absurde, investigând în același timp structurile de putere care ne mediază relația cu tehnologia. Este interesat de infrastructurile fizice care ne facilitează viața digitală, precum și de modul în care prezenta lor în peisajul natural ne afectează percepția: momentele în care utilitatea devine nostalgia. Bazându-se pe arheologia media și istoria artei, procesul său de cercetare urmărește originile modelelor noastre actuale de gândire în jurul progresului (tehnologic).

Lucrările sale au fost expuse la Inter/Access (Toronto), Transmediale Vorspiel (Berlin), Office Impart (Berlin), Onassis ONX Studio (New York), Currents New Media (Santa Fe), Romanian Design Week (București) și The Wrong Biennale. Lucrarea sa de simulare în timp real, Arcadia Inc. a fost recunoscută ca fiind câștigătoarea preiului Lumen pentru Artă și Tehnologie în 2021. Cezar este licențiat în informatică (2016) la Universitatea Yale și are un masterat în New Media Art (2021) la Universitatea din New York, unde a fost, de asemenea, rezident și profesor adjunct.

## Educatie

2019 - 2021 Master în Artă New Media (M.P.S. ITP), Universitatea New York  
2012 - 2016 Licență în Informatică (B.S. Computer Science), Universitatea Yale

## Expozitii (selectie)

viitoare *Octobre Numerique: Faire Monde* • Fabbula, curator Vincent Moulinet • Arles, Franta  
viitoare *Matrix of the Not-Yet* • Underground Art and Design, curator Amy Jiang • online  
2024 *Beyond Human* • Artemis Gallery, curatori Kirsten Eggers, Manuel Mendonca • Lisabona  
2024 *Arcadia Inc. (solo)* • Panke Gallery /rosa, parte din Transmediale Vorspiel, curator Robert Sakrowski • Berlin  
2023 *Sandbox Mode* • Office Impart, curatori Office Impart, Stina Gustaffson, Maria Paula Fernandez • Berlin  
2023 *Reverse Tar Pit* • Onassis ONX Studio, curatori Mark Ramos, Don Hanson & Sammie Veeler • New York  
2023 *Desktop Studies* • CAV Gallery, curator Spam Index • București  
2023 *The Wrong Biennale 06* • online  
2023 *Tellurian Traversals* • Putty's Coronation Gallery, curator David Temchulla • New York  
2023 *Media Art Festival Arad x Ready Media* • Muzeul de Artă Arad, curator kinema.ikon • Arad, România  
2023 *Romanian Design Week* • curator The Institute • București  
2023 *GUI / GOOEY* • Plexus Projects, curator Laura Splan • online & New York  
2022 *Dynamic Links* • www.spam-index.com, curator Nico Mures • online  
2022 Prezentă în Colectia *Lumen Prize x Infinite Objects*  
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2021 *Lumen Prize for Art and Technology* • Student Award • Londra

## Experiență Academică (selectie)

2022 Profesor, *Networked Media*, New York University Interactive Media Arts  
2022 Conferențiar Invitat, *Visualization and Computation*, Yale School of Architecture  
2022 Conferențiar Invitat, *100 Days of Making*, New York University Interactive Telecommunications Program  
2022 Critic Invitat, *Synthetic Architectures*, New York University Interactive Media Arts  
2021 Critic Invitat, *Visualization and Computation*, Yale School of Architecture  
2021 Critic Invitat, *Networked Media*, New York University Interactive Media Arts  
2021 Profesor, *Points, Lines and Systems*, School of Machines, Making & Make-Believe  
2021 Profesor, *Programming the Net*, Upgrade Education

## Rezidente, Publicatii, Conferinte

2024 *Antikythera Cognitive Infrastructures Studio* • rezidentă • Londra  
2023 *Tracing the Line* • publicată de Vetro Editions în colaborare cu Generative Hut • publicație • Berlin  
2023 *VCA Residency* • rezidentă • online  
2021 - 2022 *Rezidentă la New York University în cadrul Interactive Telecommunications Program* • rezidentă • New York  
2021 *What Does the Desktop Want?* • pentru Computer Mouse Conference 2021, prezentată de CultureHub • conferință • New York

