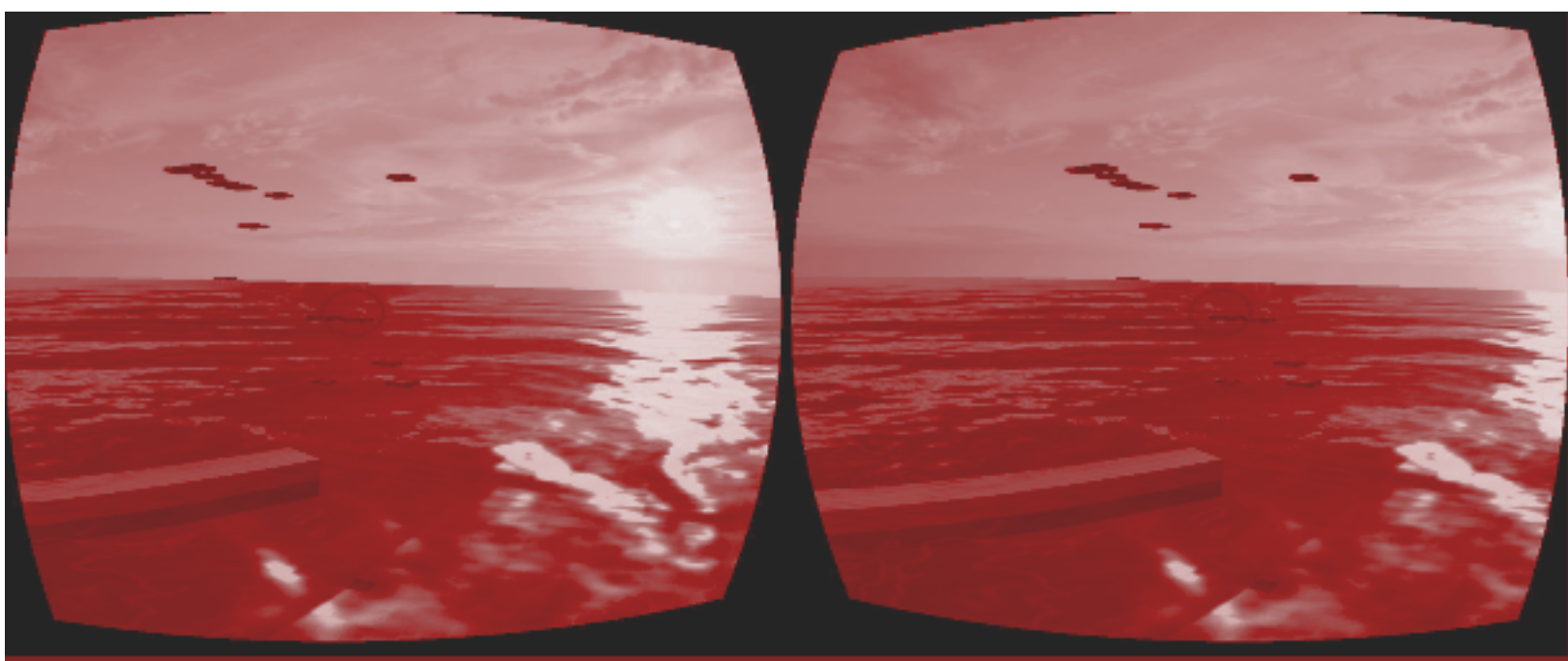
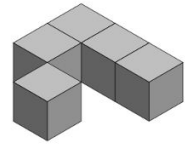


SciArt Lab Metaverse Branch

Building a lab in Decentraland

Document 001 - v2.0 November 2017





Context: What is the SciArt Lab?

- The **SciArt Lab** is a Research and Development Lab for the open exploration of Science, Art and Technology. We are currently based on the United States of America and we are planning to register a non-profit organization in Europe in 2018. However, we believe in a world built on overlapped transnational and distributed networks. We never liked physical and national boundaries, so we mainly operate in the cyberspace. And soon we would like to open a branch in the distributed metaverse.
- We foster multidisciplinary knowledge and technology-driven creativity, essential cognitive tools for the upcoming P2P Society. Our work is based on continuous hands-on learning. We create open source prototypes and contribute to the emergence of new technological experiences, exploring new ways to visualize, analyze and interact with information. We follow unconventional research approaches to hack seemingly unrelated topics such as virtual reality, artificial intelligence, ethnography, music, biology, photography, chemistry or digital art.
- Our main goal is to enable unconventional research and creative prototyping in innovative and unusual ways. We combine artistic explorations with fun science and technological implementations, hacking traditional ontological and epistemological constraints, building bridges beyond the limits imposed by a specific academic field. Discovering new methods to teach science, understanding the inner nature of social agents, playing with artificial intelligence models, composing music with genetic algorithms, simulating complex adaptive systems, exploring cognitive science with artistic representations or experimenting with new techniques for visual expression through digital photography or virtual reality.



Our history

- The SciArt Lab was born as a meta-project, a hub to organize and give a common path to several side projects. While developing our professional careers in industry and academia, we wanted to have our own platform to create without the constraints of traditional institutions; a brand to capture our passion for research, open source development and hands-on learning, a framework to canalize our creative freedom. The SciArt Lab was conceived as a platform for a new renaissance, a multidisciplinary experiment to have fun, doing what we like while actively producing open commons to share with the community.
- After a research stay in the Critical Making Lab of the University of Toronto, through some years collaborating with different universities, companies and organizations, we experienced the power of P2P social dynamics and we embraced the adventure of open knowledge production. After talking with hackers and makers, we had a first approach to entrepreneurship with the **Bitmind project**, building collaborations with different organizations in the commons-based peer production ecosystem. The Bitmind project had momentum, but personal changes came and the project was transferred to the P2P Foundation.
- We wanted to have freedom to produce more and better, to offer innovative creations to the community while keeping our creative independence. A new life in the USA and newer perspectives led to a more general and open-ended idea. We decided to create a new meta-project, a Research & Development entity which could serve as a platform for all our crazy multidisciplinary and apparently unrelated projects: the **SciArt Lab**.



- The University of North Carolina at Greensboro gave us access to resources and organizational support. With the help of some friends and collaborators we could water the first seed of the SciArt Lab during two years in United States of America. Having in mind our return to Madrid in 2018, we planned to open a non-profit organization in Europe in the following year.
- However, with a co-founder whose PhD was a theoretical and computational defense of the P2P paradigm, the goal always was to operate with freedom in the distributed cyberspace. A must, for sure, was to use distributed infrastructures and open standards. A hope, to get funded and enabled through blockchain technologies (following the initial dream of Bitmind). Another must was to have a lab accessible through virtual reality.
- We wanted to create a branch of the SciArt Lab in the new distributed metaverse which WebVR + IPFS allowed, so we started to develop our own experiments with the *SciArt Lab Metaverse components for a-frame*. But wow! We found Decentraland. A hope. A chance. A free land to discover how new economies and societies may emerge, a place where our lab and our imposible projects can be accessible for other inhabitants of a growing metaverse!
- To have a spatial lab without the need of a physical space sounds very appealing, and fundamental to develop some of the projects that we have in mind. But the possibility of doing that on Decentraland can be extremely powerful, and open the door for social interaction, funding opportunities, and our dreamed SciArtists-in-Residence program (explained below).



A lab in the metaverse

- What do we want to create in the metaverse? Actually, a lot of things. As said, the SciArt Lab is a meta-project, a hub for multiple innovative projects. We would like to offer a lot of cool stuff (mostly because what we like the most is to build cool stuff), and we can tell you that a continuous growth of new projects will be guaranteed.
- We are passionate about the potential of opening a SciArt Lab branch in Decentraland. We would love to have some land in a good location close to the regular citizens of the urban downtown of Genesis City. We think that the SciArt Lab can bring value and attractive to the center of the city itself. We have seen places like fablabs or hacker spaces (see Medialab-Prado, for example) shaping the culture of a city. In that sense, we would like to have a location in the first ring of Genesis City, so people can easily visit our exhibits, participate in workshops and talks and join the different projects of the *SciArtists-in-Residence* program.
- However, we don't hold a lot of fundings yet, so any economic support would be really helpful to make this possible. In case the Decentraland Foundation becomes our patron, we can guarantee the best reward for the project: the SciArt Lab will for sure generate innovation, knowledge production and incredible new opportunities. But mostly, it will bring creative fun, cool content and a culture of proactive experimentation to Genesis City.



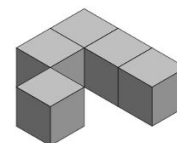
- Initially, we would like to have several facilities in SciArt Lab land: the **SciArt Lab Headquarters** building and the **SciArtists-in-Residence** modules. Both will share common ground with an open garden, temporary outdoors exhibits and information panels about our sponsors/patrons.

SciArt Lab Headquarters

Bottom Floor

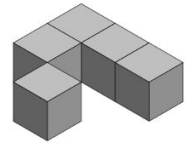
- Out of the building, in the open garden, we will have temporary exhibits. Usually, we will try to capture people's attention displaying live sculptures related with our current projects. For example, small artificial life simulators or interactive musical elements. These will be the "bait" to invite those who want to see more to visit the two facilities and explore what we can offer inside.
- The main entrance of the building will be always opened. In the bottom floor we will have a large tunnel entrance with information panels about last projects of the lab, upcoming events, schedules, contact information and a map of the facilities. There will be one or two robots to provide information to the visitors. Ideally, one of the robots will move around and out of the building, inviting new visitors to come inside.
- Behind the main entrance, we will have also a small conference hall for workshops, presentations and talks.
- We will have some rooms to offer both temporary and permanent exhibits, which will be the main outcome of our projects. We would like to provide interactive experiences with 3D audio and visual effects, self-generated psychedelic spaces created with generative art, but also movie projections or interactive canvas with our 2D projects. Depending on the amount of land helded, those experiences will be directly accessible inside the building or accessible through portals to external a-frames.





- Initially we will reserve a couple of rooms for the two main short-term projects that we have in mind. These projects will be available some months after the initial launch of the SciArt Lab Metaverse Branch:
 - **The Mol Museum:** Interactive museum of 3D molecules with expert guidance.
 - One of the founders of the SciArt Lab is Doctor in Chemistry and has experience working in computational modeling applied to neuroscience. She will be the Chemistry Curator of the Mol Museum.
 - This museum will be a first prototype to explore how scientific outreach and science education can be performed with fun interactions in a metaverse.
 - We want to use this prototype as an starting point to create other experiences under similar goals, providing access to open data and open science from within Decentraland.
 - **The Music Room:** Open-ended exploration of new ways to interact with music in 3D space.
 - Visualizing music, touching music, creating music from Decentraland.
 - We want to make possible for users to have access to 3D interactions with oscillators, samples, dynamic envelopes, etc. To interact with digital instruments and with musical objects. To inhabit musical spaces.
 - Under a modular approach, some of the outputs of this research will be eventually applied for future projects. For example, to create individual components for live music in Decentraland, create virtual musical instruments and offer them in a virtual store, etc...
 - Eventually we would also like to offer the option of interacting with the external world through MIDI and OSC protocols. The music room will be the seed of future musical tools and components which will allow users to interact with VR synthesizers from their actual MIDI keyboards or the





opposite, to execute sounds in their own DAWs from Decentraland. We are very excited about minding the gap between the real and the virtual world using music as a bridge.

- We have been already working on some preliminary research and experiments, so Decentraland will be a perfect playground to apply something we already have experience about.

Top Floor

- We will need our own space for discussing and prototyping privately. The top floor will be for that. It will be a large workspace used for the SciArt Lab founders to develop and prototype our research projects before making them public.
- We will have work tables, meeting spots and our messy experiments.
- This space will be opened sometimes and closed other times, depending on the kind of activity we are performing inside. For example, we can eventually show our work in progress, or explain to other people how we work on our projects.
- We will have our private meetings here, but also meetings with collaborators, friends and members of the SciArtists-in-Residence program.

SciArtists-in-Residence modules

- Even though the SciArt Lab was born as a personal initiative, and we need our own space for independent creation, we believe in a culture of collaboration and P2P interactions. We know that we are not the only SciArtists, and we would like to offer a space for collaborative research. The idea of the *SciArtists-in-Residence* program is to bring innovative research projects to Decentraland and enable network emergence.



- The SciArtists-in-Residence modules or collaborative spaces will be a place for that. It will be a modern network of modular buildings connected to each other, creating a dynamic space open to crazy scientists, makers, digital artists and entrepreneurs. We will offer free space for selected commons-oriented projects, and affordable leasing in the case of for-profit initiatives related with Science, Art or Technology. Different SciArtists will be hosted for periods of time under monthly or yearly agreements.
- The modules will be connected with open, transparent and minimalistic spaces and tunnels, divided in several sections. Even though each SciArtist-in-Residence (individual or organization developing their own project) will be able to have their own space, we will offer also shared spaces and an open lounge to enable networking. The building itself will inspire creators to produce together, to exchange value and put innovation and open knowledge creation at the core of Genesis City, while creating profitable opportunities for startups, content creators, developers or professional artists.
- We will define more specific agreements to support temporary projects once the buildings are up and running.

Funding and sustainability

- We need to make the lab sustainable. Some of the initial ideas are described below. All of them are still open to discussion though:



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- Individuals and organizations will be able to become patrons of the SciArt Lab. Patronage would be our preferred way of funding; it would fit with our philosophy and it would help us to create with freedom while producing open commons.
 - Most of the exhibits in the SciArt Lab Headquarters building will be initially free, but in order to fund the SciArt Lab we will accept donations at the entrance.
 - The SciArtist-in-Residence program wants to be a low-friction platform to offer collaborative space for creators. While we will offer free space for commons-oriented projects, we will accept donations from the different members of the program and we will open the door to host for-profit initiatives which can afford a leasing.
 - We may eventually consider to add a Digital Components Store to sell specific components produced during the development of our R&D projects. For example, musical instruments or interactive models to be used by other Decentraland users in their own creations. This store could be also a platform for other artists and creators to sell their own work by paying a small fee, helping that way to the lab to be more sustainable.
- We love open source, we like to create and share, so we are looking forward to bring value to Decentraland and produce open knowledge and actual components which could be used by everyone and benefit the whole distributed metaverse. Would you like to become a patron?

Contact

- If you want more guidance or information: contact@sciartlab.com

