

# **Musical Blockchain**

*World's first Creative approach to Blockchain+AI*

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**Overview/Selected Highlights**

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## 01. Overview

**Musical Blockchain** — World's first Creative approach to Blockchain+AI.

### *Where's the revolution?*

We invented and developed a computer (AI) composer solution, who composes music, using provided user data (images/pics/text/binary) **as a Source of Inspiration**, building melody tone-by-tone using the Blockchain+AI with natural-like inspiration and improvisation processes.

This means that computer naturally looks at the provided data like a real composers would look at it — getting inspired, with all genius, brilliance and tension — while scoring the soundtrack.

We propose a new, innovative way for data-inspired psychology-based melodic sequence composition, sound generation, data-driven digital art and visuals generation, new fundamentals and methodologies for computer-based **Decentralized Improvisation™**.

**This unique AI composer have no analogues in the world yet.**

## 01. Overview

When it comes to AI/computer-generated works, computer-generated sequences powered by pre-trained models are proximate to the result of the work of a real human being.

The result usually uses previously predefined patterns to replicate styles, movements and techniques.

**Our essential principle is to avoid randomly generated calculation results with pre-trained models.**

We utilize machine learning algorithms for the data analysis and deep learning of the natural-like inspiration, using our in-house developed methodologies, psychological matrix with additional emotional markers to add human-like composer/performer behavior.

## 01. Overview

**Natural-like improvisation and jamming** processes done on a technological level with the aid of a *Blockchain*.

While currently all *Blockchain* applications for all Creative Industries is about rights management, storage/sharing, direct sales and money talks, **Musical Blockchain** truly connects art, music and creativity with technologies directly on many levels.

### ***Why Blockchain?***

**Because we define musical composition as a chain of linked blocks.**

Melodic sequence being built block-by-block by the network of *nodes*, working simultaneously, with an optional coordination by the *conductor*.

Nodes are building blocks in the same way as musicians in a studio creating a melody.

Each node in a network represents a different voice/instrument with own charisma/character, building its own part of a block.

Another block of melody being built when all nodes reach consensus.

## 01. Overview

**Musical Blockchain** already have a **profound impact on the real world** in a different ways:

We use our invention in the music, art, culture, education, urban/city development initiatives, number of social initiatives, medicine/psychology/audio therapy research, and various other areas.

Please, find real world examples and details of these (and other) applications in this document below.

## 02. Selected Highlights

We would like to offer a selection of highlights since our public launch in **July 2018**.

### **Learning Process:**

**3874 tracks** have been generated for the learning/work processes during pre-beta and first public 6 months.

Over half of it turned out to be unique music.

Music, inspired by user data and not randomly generated.

We again **boldly** pointing out, that we're not using models pre-trained on existing world's music/sounds for any sequence generation.

Learning done only using own generated music and classical music knowledge from last century.

Whitepaper with details: <https://musicalblockchain.com/musicalblockchain-whitepaper.pdf>

## 02. Selected Highlights

### Music:

**4 albums, 2 singles, 4 installation soundtrack, 3 full-day exhibition soundtracks** has been produced and presented to the audience.

First album available for free on — <https://soundcloud.com/musicalblockchain/sets/portals-and-their-inhabitants>

Deluxe physical versions (where applicable) available as a Collector's Editions.

We were privileged to air our first special single "**Sky01i**" at the **National Lithuanian LRT radio** during exclusive interview in October 2018.

**"Kosmosonic Konglomerate with Musical Blockchain"** *artificialive* multimedia act signed a contract with a record label FAYR (distributed by The State51 Music Group) in October 2018.

## 02. Selected Highlights

### Live:

"**Kosmosonic Konglomerate with Musical Blockchain**" *artificialive* multimedia act performs with own audio/video material and combines generative music, generative art, video projections, light and FX to create unique experience for a listeners/viewers, showcasing next level of a machine-human creative collaboration.

Act successfully performed at the **GMD Vilnius 2019** (Street Music Day) and **Kulturos Nakties Vilnius 2019** (Culture Night) — Vilnius' important culture dates — with a sets of new shows.

With the audience dancing and chilling during the performance — it was the best example that this AI-composed music is **The Music**.

Among the events, played in 2019 — **Supynes Festival, No Trolls Allowed, EmEm Fest, Užupio Vasaros Kulturos Diena** as well as other music/art/tech events in Lithuania and EU.

We already played **30+** successful *artificialive* multimedia shows and completed our "*Pleasant, Unexpected!*" mini-tour.

Please refer to the news section of the official site for a list of Upcoming Performances and updates.



## 02. Selected Highlights

### Collaborations:

We collaborated with **40+ artists from around the globe** and together made some small steps in a huge machine-human creative collaboration.

Most notable collaboration (in our opinion) — with **Bill Drummond** of **The KLF** and **Tracey Moberly**:

[soundcloud.com/musicalblockchain/no-music-day-2019-vs-bill-drummond-multilayer-techdemo-with-synths](https://soundcloud.com/musicalblockchain/no-music-day-2019-vs-bill-drummond-multilayer-techdemo-with-synths)

### Spreading the word:

During first 6-months period we participated in 10+ conferences, talks, masterclasses, presentations and so on. World's first creative approach to Blockchain+AI was highly anticipated and always was an attractive highlight of the event. We're happy to tell the world about our innovations and inventions — and that's what we're doing still.

Random Highlight: **Musical Blockchain** with a **"Cre-AI-tivity: for the Human-Computer Interaction"** keynote **opened** largest, richest in content, and probably the boldest innovation gathering in the Baltics — **LOGIN 2019 Conference** — with a fully packed room with no free seats and the audience standing in the aisles.

### Socials:

Among our social networks — Twitter takes the lead. We have over **1,5K** organic followers — and growing (our top tweets — **50k+** organic impressions and **300k+** overall impressions).

Total spent on marketing/promo/ads/boost: 0.00 EUR.

## 02. Selected Highlights

### **Digital Art, CryptoArt, NFT, Digital/Culture and Education:**

Digital/Crypto Art, generated by **Musical Blockchain** presented and tokenized in a partnership with KnownOrigin.io platform. Accompanying AudioNFT currently in beta-testing.

**Musical Blockchain** team's activities recognized by DADA NYC, ArtProject Decentralized, KnownOrigin, RareAF and other players of the modern Digital/Crypto Art scene.

**GalleryBox** — Digital Art hardware+platform solution for the real Galleries, created for the popularization of the Digital Art, popularization of the blockchain-enabled art galleries and features, showcase of a curated digital artworks/collections and additional revenue streams for the galleries in the new age — was presented and heavily used in collaboration with various galleries, festivals, performances and installations since its introduction in the beginning of 2019.

**Musical Blockchain** team launched **Digital/Culture Center** and **CryptoArt Hub Baltics/EU** — international mobile space and a community, dedicated to the popularization of the Digital Art, Art+Tech, Culture+Tech and a new wave of the Future Digital Artists, collectors and fans.

It is created for a worldwide mobile **Hub Space** and organization of the Events, Meetings, Ideas exchange, **Educational programs and activities** — Cultural/Blockchain education, Networking and more.

Our **Educational programs and activities** includes programs and products for Children, our own programs supporting Women In Tech and Women In Music.

## 02. Selected Highlights

### **Educational initiatives:**

We launched educational initiatives: "**Music and Innovations**" series in 2018, "**Culture/Innovations**" series in 2019 — combining educational/professional orientation lectures, interactive talks and shows for general target groups starting from 15+.

For the **creative educational activities for the children Musical Blockchain** team collaborates and partners with the **VIVISTOP Užupis** by **VIVITA Lithuania**, Lithuanian branch of the **VIVITA International**.

For the "**Musical Blockchain for Education**" program we collaborated with educational organizations from EU, Mexico and Russia to create a new methodologies for a creative schools of a new age.

**Musical Blockchain** partnered with a **Music Innovation Studies Centre** of **Lithuanian Academy of Music and Theatre** (*LMTA Muzikos inovacijų studijų centras*) for the development of the ideas for the future of musical education, interdisciplinary projects and showcases.

The Lithuanian Academy of Music and Theatre (**LMTA**), founded in 1933, is an internationally recognised higher education institution which trains artists for a professional career in music, theatre, dance and film and offers related theoretical studies.

## 02. Selected Highlights

### **City development/social involvement/audio-ecology/ecological initiative:**

In 2018 we launched "**Sound changes the City**" series — interactive lectures, masterclasses and a city research project.

In 2019 we scaled our initiative and presented **Sound changes the City / Sound changes the Planet Global Initiative**.

### ***What's new to hear?***

**Sound changes the City / Sound changes the Planet Global Initiative** is revealing how ambient sound design can impact the urban environment and communities.

We propose **Sound** and its **Cultural impact** as a unique medium for a social and global change.

Bringing together Communities, Citizens and Artists, acting from the *City* and the *Sound* sides, together we're brainstorming, exploring and creating audial experiments and solutions that improving livability and walkability of the City.

Our focus — are results that could be used in a real life for the real City-related work and from the Artistic side.

## 02. Selected Highlights

### **Sound changes the City / Sound changes the Planet Global Initiative:**

Launched in 5 countries (data: December 2019; public launch: July 2018), initiative is taking place throughout different **Cities** around the **World**.

We're working with local and global companies, governmental organizations, communities and individuals.

Features:

**CitySenseBox™** and **PlanetSenseBox™** — in-house developed families of the mobile and stationary IoT devices for the improved City measurements.

Integral part — "**Musical Blockchain for Cities+IoT**" with the industrial-grade equipment

**City Symphonies™** – highly anticipated unique musical shows (performed *live* with local musicians), composed from the City data of different districts using world's first true AI composer **Musical Blockchain™**.

**City Symphonies™** are a permanently evolving Audio Snapshot of a City's current state. These musical shows are result of the *Human-Computer Interaction*.

More details of how **Sound changes the City / Sound changes the Planet Global Initiative** can benefit your city and updated proposal are available here: <https://soundchangesthecity.org/sctc-proposal2019.pdf>

## 02. Selected Highlights

### Medical research:

Our collaboration with researchers/psychologists in a field of Psychology/Audio Therapy (which, actually, resulted in a working prototype and main **Musical Blockchain** solution) launched since 2017. Some of the EU/RU/UA and US professionals already on-board.

Looking forward to our productive collaboration with *Japan* researchers (currently — in progress), as we're aware about the whole situation there.

## 02. Selected Highlights

### Art and culture:

**"Musical Blockchain for Installations"** with dynamic lighting and 2-layer sound debuted with **"Madonna" spiritual installation**.

Public event of the permanent **"Madonna" installation** opening in Švč. Mergelės Marijos Ramintojos church:  
<https://www.facebook.com/events/2276195202662904/>

8 Movement generative symphony of **"Madonna" installation** and story details:  
<https://musicalblockchain.com/m/madonna-installation/>

The installation is part of a global city development/social involvement initiative **"Sound changes the City"**.

**Musical Blockchain** successfully debuted at the **ArtVilnius Art Fair 2019** as an unique innovation in Art+Music+Tech with a detailed presentation and a demo exposition/stand.

You can take a look and listen to the **"True Chill Area"** collaboration with an *extraordinary* painter **Tadas Tručilauskas / Užupio Meno Inkubatorius**, presented during **ArtVilnius Art Fair 2019**:  
<https://musicalblockchain.com/m/true-chill-area/>

**Immersive Art Installation "Digitized?"** presented at the **EmEm Fest** and **Immersive Art Installation "Jonas Mekas Immersive Reel"** showcased expanded range of the **"Musical Blockchain for Installations"** possibilities.

## 02. Selected Highlights

### Renditions:

Music, composed by **Musical Blockchain** was played live on a private presentation event by string quartet and guitar on **09 Feb 2019**.

It's a **world's first rendition by a real musicians** of a tracks, composed by computer, altogether inspired by the same real art piece.

Preview clip: <https://www.facebook.com/musicalblockchain/videos/2021209637926630/>

First-ever **public** rendition of **Musical Blockchain**-composed tracks by a real musicians happened on **24 Feb 2019** during "Madonna" installation opening. Live video samples of an opening performance:

<https://twitter.com/MusicalBlockchn/status/1099636768146628609>

<https://www.facebook.com/musicalblockchain/videos/1222844227863126/>

<https://www.facebook.com/musicalblockchain/videos/332057430776885/>

In September 2019 with the **Sound changes the City / Sound changes the Planet Global Initiative** we presented a new LIVE rendition — **Vilnius City Symphony™** — highly anticipated unique musical shows, performed *live* with local musicians, composed by the **Musical Blockchain**, *inspired* by the City-data of different districts.

<https://www.facebook.com/events/613378909187996/>



## 02. Selected Highlights

### Renditions:

#### "Brayden Drevlow plays AI Songbook"

In October 2019 for the first time in the history of mankind set of tracks composed by AI-Composer Musical Blockchain were selected to be played in a solo concerts by an American piano virtuoso Brayden Drevlow.

These concerts are another LIVE result of the *Human-Computer Creative Collaboration*.

**Concerts in Germany:** October 6th and 11th, 2019.

<https://www.facebook.com/events/514399359325438/>

<https://www.facebook.com/events/413031372943312/>

More **LIVE** and *artificialive* renditions around the world are on the way.

## 02. Selected Highlights

### Film industry:

"**Musical Blockchain for Soundtracks**" (codenamed: *AutoReznr*) is scheduled to debut with an OST for a short film, marking new step in a film scoring and another milestone in a machine-human composition.

Official details to follow.

### Future announcements:

In a following months we're planning to announce more products and solutions using our technologies, including applications in a fields of musical hardware, gamification and mobile, tourism, technology showcases and installations.

### 03. Mentions

**Musical Blockchain** included in a recent report by *Deep Knowledge Analytics*.

Report outlines the history, present state and future of AI Industry in 11 Eastern EU countries, profiling 500 companies, 230 investors, 30 AI Tech Hubs, 60 influencers and 15 conferences.

<https://www.dka.global/ai-in-eastern-europe-report>

**Musical Blockchain** recently listed in a "Blockchain For The Music Industry: 9 Startups To Watch In 2019" list by *Disruptor Daily*: <http://disruptordaily.com/blockchain-startups-music/>

**Musical Blockchain** recently included in a "Künstliche Intelligenz im Umweltbereich — Anwendungsbeispiele und Zukunftsperspektiven im Sinne der Nachhaltigkeit" (*Translation*: Artificial intelligence in the environmental field — Application examples and future perspectives in terms of sustainability) by *Umweltbundesamt (UBA)*:

<https://www.umweltbundesamt.de/en/publikationen/kuenstliche-intelligenz-im-umweltbereich> [DE]

### 03. Mentions

#### *Other notable mentions and results:*

In **June 2019 Musical Blockchain** was selected among the **23** finalists for the "**Naujasis knygnešys 2019**" competition — Lithuanian pre-selection contest for the "**World Summit Awards 2019**":

<https://ivpk.lrv.lt/lt/naujienos/atrinkti-konkurso-naujasis-knygnesys-2019-baigiamojo-renginio-dalyviai-konkurso-laimetojai-paaiskes-birzelio-19-d> [LT]

In **October 2019 Musical Blockchain's** initiative **Sound changes the City / Sound changes the Planet Global Initiative** was selected among the top **10** finalists for the international GoTech Innovation's "**GoTech ARENA forum/NOMINATION ROSTELECOM**" competition with the **CitySenseBox™/PlanetSenseBox™** families of mobile and stationary IoT devices for improved urban measurements.

[https://gotech.vc/en/novosti/novosti\\_gotech/gotech2019\\_finalists/](https://gotech.vc/en/novosti/novosti_gotech/gotech2019_finalists/)

### 03. Mentions

#### *Other notable mentions and results:*

**Paul Sanders** of **The state51 Music Group** (UK/music industry) stated about us: "The most sensible use of blockchain I have yet seen in music".

<https://twitter.com/ratpie/status/1019629870316445697>

**Forbes** Technology Council loved the innovation and the way we bringing music and Blockchain together.  
*(private conversation, not for disclosure)*

**Musical Blockchain** received positive feedback from the investors, professionals and visitors at the various conferences, discussions and festivals, including **Wolves Summit 2019** (PL), **Pioneers '19** (AUT), **ArtVilnius Art Fair 2019** (LT), **LOGIN 2019** (LT), **Innovation Drift 2019** (LT), **iDA (International Digital Art) Festival Manchester** (UK), **EMEM Fest** (LT), **Lokacija** (LT), **No Trolls Allowed** (LT), **Supynes** (LT), **GoTech Arena** (RU), **Art Fair Foto Tallinn 2019** (EE), **AI x Music** (DE).

## 04. Core team

Two key persons in a team — are inventors — **Gleb Divov** and **Anton Lenin**.

Like a *Beatles* single, which has two 'A' sides, both members are visionaries responsible for the development of the invention and a whole accompanying FAYR Ecosystem with a huge attention to the details.

Knowing each other for more than 30 years and having over 20 years of experience in a fields of software development, music, art, math, education, psychology, physics, entrepreneurship, and much more — team constantly creating high-potential scale-ready pioneering creative innovations and solutions at the intersection of technologies with music, art, education, medicine, urban/city development, show business, and related areas.

Team HQ located in the **Republic of Užupis, Lithuania**.

## 05. Contact information

E-mail:

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Official site:

<https://www.musicalblockchain.com>

Social media:

Twitter — <https://twitter.com/MusicalBlockchn>

Facebook — <https://www.facebook.com/musicalblockchain/>

## **06. Final words**

We believe that the tools for inspiration and boosting creativity will be your next best friend in the studio, on-stage, and at home.

We believe that man-machine collaborations, unique inspiration-driven soundscapes and generative digital art will create a beautiful sonic and visual experience.

We believe that new technologies will change the concept of music, art and related fields, as photography changed it all almost 180 years ago.

We believe that technology can spawn a new generation of young musicians and artists, utilising tools as tools, and not as a replacement for talent.

We believe that making solutions for a real world is the only way forward.

**The world has changed yesterday.**

**Are you ready for a future?**