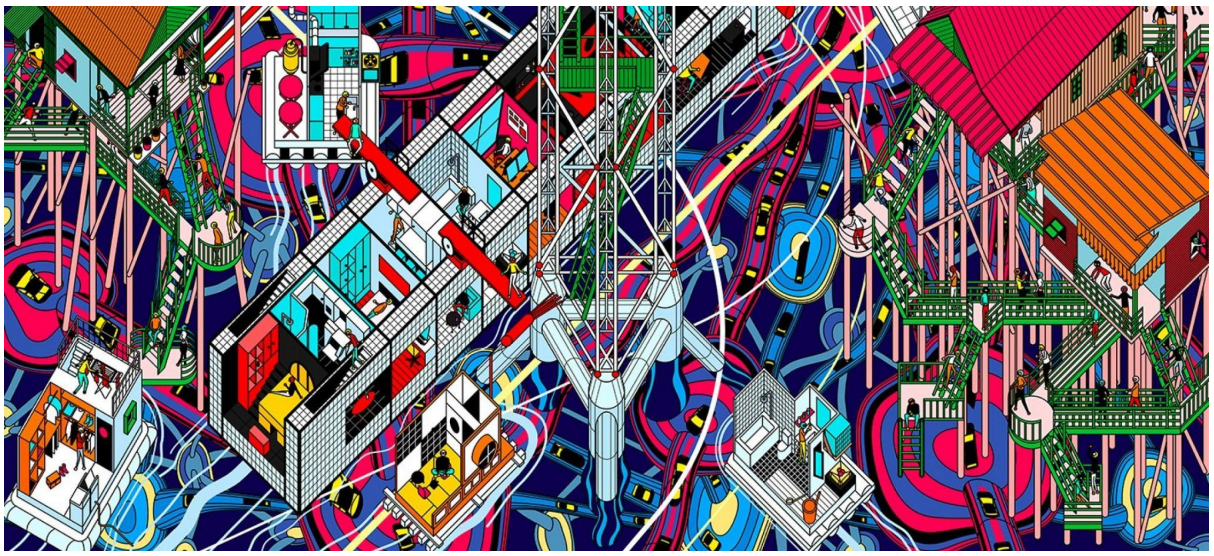
DAO Town - White Paper

Metaverse Architecture for Organizations of the Future

Draft 0.4 April 8, 2022

1. Introduction



Inspiration: ARCHIGRAM CITIES by Archigram

DAO Town offers metaverse architectural design to organisations of the future by creating a virtual world for onboarding users to the world of Web3.

We are nurturing an ecosystem of digital architects, game designers, legal experts, and blockchain engineers, who will together serve Web3 organisations by helping them visualise their offering, mechanics, and governance, thereby helping them attract and retain new members.

Our prototype, DAOTown.com, is a browser-based game that communicates the potential of the DAO and Web3 ecosystem. Combining the aesthetic of city builder and top-down RPG games, DAO Town introduces newcomers to Web3 by allowing them to interact with DAOs in the NEAR ecosystem. This focuses on interfacing with core functionality of these existing DAOs and creating a quest tutorial to engage new users.

ABOUT DAO Town DAO

As an organisation, DAO Town will also function as a DAO. The DAO Town DAO represents our commitment to continue developing the product and services through an open, transparent, and collaborative approach that embodies the DAO Town Guiding Principles. Our hope in creating this DAO Town DAO is to nurture a welcoming space for all contributors to the wider DAO ecosystem, from architects, designers, artists and developers, to lawyers, psychologists, scientists, and activists.

The DAO Town DAO will seek to engage these contributors, through invitations to participate in the governance, development, provision, and receipt of DAO

Town ecosystem offerings, navigating the challenges and opportunities of onboarding themselves, and their own communities, into the DAO and Web3 space, through the co-creation and use of visual worlds and playful quests.

2. Background

"[The code] will present the greatest threat to both liberal and libertarian ideals, as well as their greatest promise. We can build, or architect, or code cyberspace to protect values that we believe are fundamental. Or we can build, or architect, or code cyberspace to allow those values to disappear. There is no middle ground. There is no choice that does not include some kind of building. Code is never found; it is only ever made, and only ever made by us."

- Lawrence Lessig (December 11, 2006). "Code Is Law / Code 2.0".

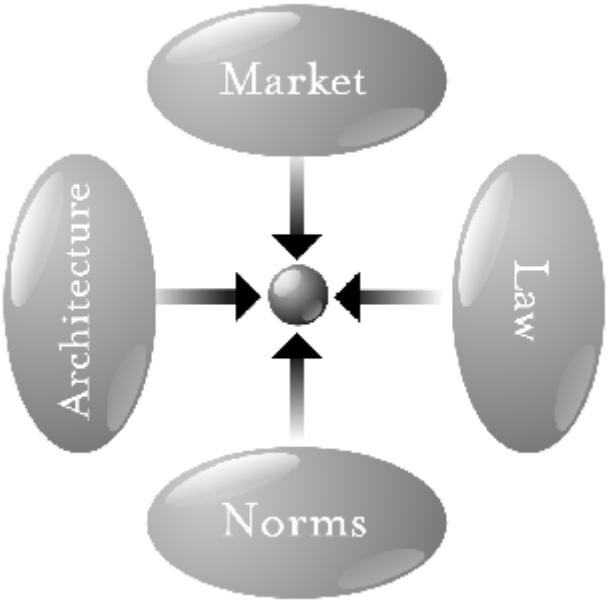
"It's now less about Code is Law, it's "Business Models Eat Law"

- Lawrence Lessig (at CodeX FutureLaw 2022)

Business models premised on extracting and harvesting user data for advertising profits drive organisational behaviour that overrides the intentions of the most ethical engineers, lawyers, and data governance professionals.

These business models, which have been adopted by some of the most powerful and influential organisations of our time, have been dubbed "Surveillance Capitalism"[1]. A runaway global architecture of behaviour modification, where the mining of our information is used to predict and shape our actions, has ultimately led to the undermining of our personal autonomy and well-being, while eroding our democracies and shared information environments.

[1] Zuboff, Shoshana. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. New York: PublicAffairs, 2019.



In Lessig's theory of the four forces that regulate our actions: law, social norms, market, and architecture, the law threatens sanction if it is not obeyed, social norms are enforced by the community, markets through supply and demand set prices on various items or actions, and architecture refers to the features of the world, whether made or found, that constrain us.

Unlike architecture in the real world (based on laws of physics, biology, and major social and cultural forces) the architecture of the internet, the computer code that underlies all software, is created by humans. However, it is no longer controlled by humans, rather it is controlled by powerful corporations driven by business models operating through extractive systems of surveillance capitalism.

Web3 sets out to solve these issues, by creating digital infrastructure where:

- Users own their own data, not corporations;

- Global digital transactions are secure; and

- Online exchanges of information and value are decentralised.[2]

Web3 comprises protocols that operate at different layers of a technology stack. Layer 1 protocols like Ethereum and NEAR are public blockchains that allow for the creation of smart contracts. These smart contracts have come to embody the principles of "Code is Law", in a more transparent, open, and user-aligned manner. Unlike the code of Web2 platforms premised upon surveillance capitalism, where an extractive business model was able to operate through closed, proprietary code and algorithms, the code in smart contracts allows for transparent agreements, commitments, rights,

[2] https://web3.foundation

responsibilities, and values to be encoded into program code that is deployed to these public blockchains.

The program code on these public blockchains is open-source, meaning that it can be both seen and copied by everyone. Being open-source, standards for these smart contracts develop at a fast pace, including around the issuance of tokens used to signify and transfer value. The "Non-Fungible Token" standard is one such smart contract standard that has been developed and widely used to signify the transfer of rights or recognition in relation to limited edition digital artworks.

These NFT standards continue to evolve, with use cases developing around enabling the remixing of creative content, proving one's attendance at events as part of individual and collective identity emergence, and the measuring, reporting, and verifying of social or ecological impact.

These smart contracts can make use of functionality of Layer 2 protocols, such as state channels, encrypted storage, and oracles, and others can build on these smart contracts. When thus composed into more complex arrangements, these coordination systems can come to resemble the operations of traditional organisations, save that many of the functions of the organisation have been logically and transparently defined by their smart contracts. These systems of coordination have come to be known as DAOs, or Decentralized Autonomous Organizations.

The first DAO in 2017 was used to decentralize and automate the collection and distribution of funds for the development of Web3 applications. Today, DAOs are being created everyday spanning a range of areas from venture capital, to philanthropy, to coordinating around scientific research, to governance of nature-backed currencies, the possibilities of what a DAO can be and can do are bound only by our imaginations.

Common to all DAOs, though, is the ability to participate in the making of the rules, in the crafting of proposals, voting on decisions, and the shaping of norms.

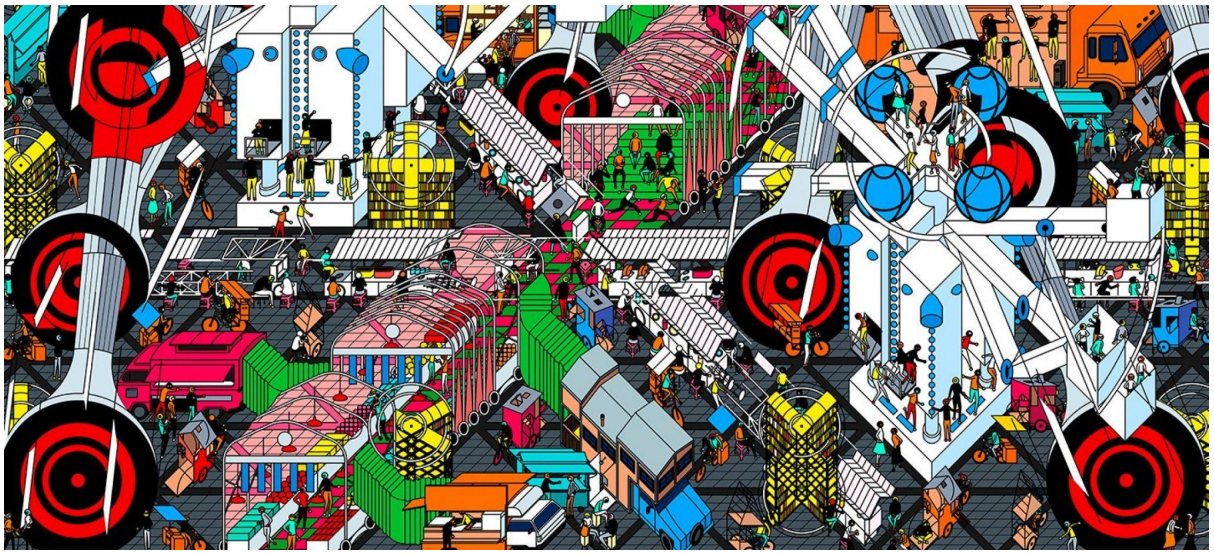
DAOs enable greater control and collective agency over law, norms, markets, and architecture. DAO Town enables access to this collective agency, while charting a hopeful, expansive, and non-extractive future for the architecture of the internet and the metaverse.

3. Problem

Web3 and DAOs represent a significant set of solutions to the challenges to individuals and democratic societies presented by surveillance capitalism. DAOs have the potential to create new communities that are fundamentally different in terms of access, ownership, and governance.

However, there are several barriers to entry for users. For example, the sheer range of possible models of governance, plus the lack of coherent visual identity, mean that new users can find the learning process very daunting. The challenge of discovering relevant DAOs for a prospective participant is also hampered by a lack of curation around appropriate factors that might be of interest.

4. Prototypes



Credit: ARCHIGRAM CITIES by Archigram. Techology and urbanism are indivisible.

Participation from across the spectrum of talents will be required in order to build the vision of a free, decentralised and open web3 internet. To engage with this diversity, engaging and participatory onboarding, education and information is needed.

DAO Town initially caters to the following core user groups

- Absolute beginners to Web3 (never had a wallet before)
- Experienced users of Web3 but never worked with DAOs

#PROTOTYPE GAMEPLAY

DAO Town initially focuses on ‘experiential onboarding’ in order to help new members understand how selected DAOs in the NEAR ecosystem function.

Our DAO Town prototype is divided into four zones:

- Town Square (containing Town Hall for DAO Town’s own DAO);
- Research Centre (for DAOs looking to build a metaverse identity);
- Cultural Zone (for metaverse architects and artists)
- Campus (a learning centre for learning about DAOs and Web3)

The current prototype demonstrates the successful integration between a browser-native game environment (built in Unity3D) and the NEAR blockchain.

First, users are asked to connect or to create a NEAR wallet, which enables them to interact with the DAOs. The architecture of DAO Town acts as a visual guide to help visualise core information from DAOs created on NEAR's AstroDAO platform.

Players then follow a simple 'onboarding' quest through DAO Town, where they are guided in a linear sequence through the four zones. When they approach a building, such as the Town Hall, for example, they can query the key 'primitive' components of the DAO (which are also universal to every DAO): Constitution, Membership, and Proposals. At the end of the quest, they are free to explore the rest of the game environment. In future versions, completing the 'onboarding' quest will give a token that makes them a 'citizen of DAO Town'.

#FUTURE PROTOTYPES

Future quests will guide new users through the entire process of onboarding, from creating a wallet, joining an existing DAO, to creating a new DAO - all within a single platform. The reward for successful quest completion will be a token or NFT.

We will explore how to combine the game mechanics of social RPGs with the economics and rewards of NFT drops and virtual real estate. Embedded within our core architecture is the ability to build meaningful relationships and on-chain partnerships with other DAOs.

We will explore acting as a 'matchmaking' centre to connect DAOs and organisations looking for a tangible presence in the metaverse, with architects and designers who are looking for clients to build for. This community will be supported by our DAO Town core team.

We use our core expertise in computational law, blockchain architecture, and virtual world design to help these initial citizens of DAO Town to create a coherent presence within our metaverse. This 'curated' onboarding will involve helping them design a presence within one of the 'Zones' of DAO Town: the Town Square, Research Centre, Cultural Zone, or Campus.

DAO Town will be set up as a DAO itself managed by a foundation in order to maintain openness and ensure everyone is invited to participate. The following chapters will outline further guiding principles and values as well as planning to establish the DAO Town foundation.

Our next version will focus on building key 'anchor tenant' DAOs with a focus upon DAOs supporting architects and artists, science and research, and collective action around environmental issues; and creative and cultural institutions seeking to build new models of collective decision making.

The core DAO Town team will help support the ecosystem by building the infrastructure of DAO Town itself: the associated DAO, blockchain integrations, virtual world identity, and branding. The core 'DAO Town urban planning division' will start by focusing on our core expertise: bringing together metaverse design, blockchain engineering, game design, and computational law.

5. DAO Town Guiding Principles

The development of DAO Town is guided by the following principles (PARTICIPA):

Porosity

- Architecture defined by openness and intersections (See DAO Town Architecture, below.)

Accessibility

- Experiences defined by onboarding and inclusion. Enable blockchain literacy. Bridge knowledge gaps. Offer doorways to invite through aspects of existing identity. Reduce technical jargon. Visualise actionable routes as quests.

Radical Collaboration

- Radical in the sense of developing and embodying a root-level approach to rethinking and nurturing the ways we are communicating, coordinating and creating together, using all the tools and frameworks (architecture, law, technology, biology, economics, sociology, psychology etc.) at our collective disposal.

Transparency

- A core aspect of Web3 and blockchain, DAO Town is also guided by the wider philosophy of open, public actions that can root out corruption and bad actors, and enable more efficient, fair, and accurate collective sensemaking and decision making.

Interoperability

- Intersectionality. Border town frameworks.

Curiosity

- Be engaging and interactive. Optimise for joy, playfulness and experimentation. Facilitate the unique state of mind that enables us to experiment and seek novelty, accelerating our learning modalities.

Interdependence

- https://www.interdependence.online/declaration

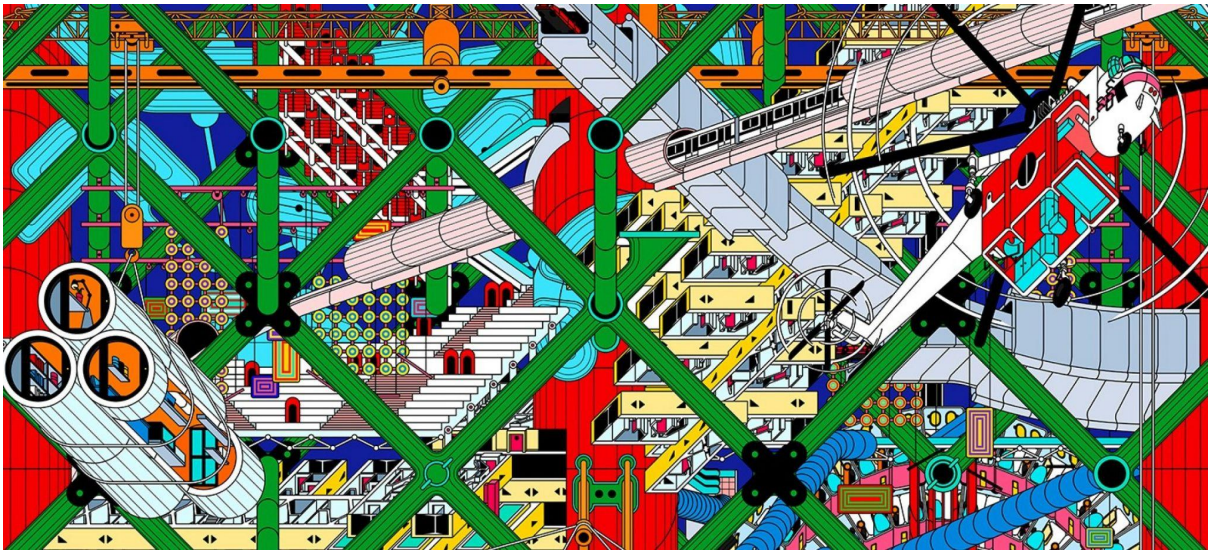
Pluralism

- https://www.radicalxchange.org/media/blog/why-i-am-a-pluralist/

Agency

- In the context of activation of collective action, we are guided by the principle of individual and collective agency, seeking to nurture action based on recognition, mobilisation and combination of both culture and structure for goal attainment in the context of activation of collective action.

6. DAO Town Architecture



Credit: ARCHIGRAM CITIES by Archigram. Design based on intersections and porosity.

"Architecture stands with one leg in a world that's 3,000 years old and another leg in the 21st century. This almost ballet-like stretch makes our profession surprisingly deep. You could say that we're the last profession that has a memory, or the last profession whose roots go back 3,000 years and still demonstrates the relevance of those long roads today. Initially, I thought we were actually misplaced to deal with the present, but what we offer the present is memory."

- Rem Koolhaas

The guiding metaphor for DAO Town's architecture is the border-town, a place of exchange between two or more different worlds.

As a North Star, we see DAO Town operating as a border-town between Architecture, on one side, and the Metaverse and Web 3.0 on the other. We hope to nurture the values and principles for architecture in the digital age.

Practitioners from all sides find in DAO Town a place to learn and collaborate with one another, building on pattern languages for border-town architecture that orchestrate services and support from across disciplines to create and curate the optimal sensory-spatial and coordination contexts for collectives of the future.

Initially, we are working alongside DAOs in the DAO Town ecosystem that represent specific ecosystems of knowledge and practice, including art, ecology, gaming, law, science, architecture and web 3.0 development, as well as from both eastern and western cultures. By experimenting with the architecture and development of onboarding quests and border-towns for and between these ecosystems, while building a knowledge-commons of learnings along the way, we hope to nurture the vibrant possibilities at the intersection of worlds.

Architecture can stand as a meta-profession with a leg in the old and the new, in theory and practice, in art and science. With DAO Town, we offer a way for architecture to build virtual headquarters, interaction spaces, and border-towns for DAOs. As a discipline and practice, this meta-profession will involve the orchestration of the full range of technical, legal, and social tools and frameworks for decentralised coordination across physical and digital spaces.

The architecture of DAO Town is also guided by the principle of Porosity.

Porosity is the characteristic of a material relating to the empty space that is accessible within it, describing, for example, how easily a liquid like water can penetrate a solid material.

Material urban environments are based on logics of boundaries and doorways, walls, gates, and thresholds. As agents, players, human beings, we go through these thresholds and get access based on certain criteria, for example our status, wealth, or privilege, or membership of a particular group.

An urbanism based around DAOs, rather than traditional corporations or organisations, differs on a material level: The boundaries of the organisation are no longer drawn by continuous lines, rather they are defined by the spread of individual members of the DAO.

Thus the architecture of DAO Town will give spatial identity to social communities by not only enabling a coherent visual and architectural identity for their social spaces but also by visualising and defining communities more as a collection of particles than via a series of boundaries. When two DAOs are mixed together, this architecture projects bodies of particles which mix and intermingle and may react or repel. DAO Town is based on this urbanism of porosity and granularity; mixing is part of the logic of this urban flow, a flow no

longer about passing through enclosures and bounded space, but about porosity, interference, and interaction.

7. Future Prototypes

Our initial prototype is the first step to what we hope is a longer term project. Following our MVP focused on visualisation, we hope to build future functionality to enable further interaction in other unique aspects of DAO such as voting and proposals.

By using the architecture of the 'town square', or 'town hall', together with the potential of gamification or rewards for players, we think that DAO Town could help grow a community of new users, as well as create a coherent architectural identity to the emerging space.

If we can create an appealing 'city simulator' that engages and attracts NEAR ecosystem users to start building a social community around DAO Town.

DAO Town will be a playful way to engage with DAOs in the NEAR ecosystem through a gamified architectural simulation. This builds on the familiar gaming archetypes of city simulation (e.g. SimCity), and the interaction of top-down RPGs and gamified social networks (e.g. GatherTown).

Just like architectural visualisation is a huge part of architecture in terms of getting buy-in from the public, stakeholders, funders, and communities, we envisage DAO Town to be the same for DAOs, simulating this new social architecture in richer and more experiential ways.

8. Future Work: DAO Town DAO - Support and Services for the DAO Town Ecosystem

DAO Town DAO

To bring DAO Town to its full potential, DAO Town itself will be set up as a DAO premised on the Guiding Principles above. During the early stages of the project the DAO will be deployed to the testnet first. After a finite amount of time, the DAO will be deployed to mainnet. The purpose of this is to ensure proper functioning as well as extensive testing of all proposals. After the

release on mainnet, the testnet DAO will continue to function for the sole purpose of further development and testing.

All the DAO Town ecosystem and support functions will be available as in-game mechanics with the intent of deeper immersion and building a better understanding for its residents.

DAO Town Governance

DAO Town will implement structures to ensure an ideal basis for collaboration amongst all stakeholders. Therefore the following initial setup regarding governance is proposed:

1. Proposals

   Members Only - Only members or holder of DAO Town governance tokens can submit a proposal

2. Structure

   Groups and Committees - Specific groups can vote on specific proposals such as explicit content policies for example

3. Voting Power

   Democratic - Every member gets one vote

Data and Privacy Policies

DAO Town does not intend to collect any information or data about persons. However where and if necessary at all to provide services which in their nature requires provision of personal data, DAO Town will do everything possible to protect sensitive information and comply with local law where required, and a least-needed policy will be formed to further reduce data collection and usage.

Content Policies

Due to the nature of decentralisation of Web3, it may be impossible to remove content that may be offensive or explicit. DAO Town seeks to create an environment where each member of the community can feel safe, therefore content deemed offensive may be occluded through in-game mechanics.

In awareness of the harms of censorship, we recognise that what is deemed to be offensive or potentially harmful is a delicate matter and such determinations should not be taken lightly. To accomplish a fair process for all, decisions will, wherever possible, be implemented in ways that leverage the possibilities of DAOs and open, inclusive, decentralised governance.

DAO Town Support Services

Upon launch, DAO Town will provide additional services to grow the community and help on topics surrounding DAOs.

Architectural

- Support for metaverse HQ design and development of border-towns.

Technical

- Support for Web3 technology based blockchains

Legal

- Support for legal and governance arrangements

Social

- Community services and management

9. DAO Town Team

Farsight / Lawrence Lek Studio

Lawrence Lek: Project Lead, Design, Storytelling

Digital artist and filmmaker with a background in architecture and music.

PhD in Virtual Worlds and Cinematics from Royal College of Art, London

10+ Years working in the fields of audio-visual installations + music performance

10+ Years using video game engines to create CGI films and architectural simulations.

Pioneer in using CGI and 3d environments in the field of visual arts and electronic music

Extensive list of exhibitions, international awards

https://www.sadiecoles.com/artists/51-lawrence-lek/biography/

General Collectives

Tony Lai: Project Lead, Ecosystem and Legal

Lawyer, researcher, and entrepreneur specialising in blockchain governance

15+ Years working with companies, government agencies, law firms, and nonprofits on legal technologies and practical use cases in governance and compliance

Founder of the Blockchain Group at CodeX, the Stanford Center for Legal Informatics.

Founder of Legal.IO, deploying technology to scale legal access worldwide

Founding team of StartX, the Stanford-affiliated startup accelerator

Linkedin: https://www.linkedin.com/in/tonyklai

Keyko

Sebastian Gerske: Development Lead, Blockchain

Current side project is Umlaut Games.

20+ Years in almost all disciplines of software development.

10+ Years experience in Software development in the Automotive Banking sector

5+ Years experience with Blockchain technology

Founding member of Keyko GmbH - website

Former member of the Founding Team Ocean Protocol - website

Github: https://github.com/h34d

Alexander Schrinner: Game Development, Product

Currently Vice President of Product at SuisseDAO.

10+ Years experience in Automotive Banking sector

8 Years experience in regulated financial services using agile methods

Game Design + Sound Designer at Umlaut Games

Linkedin: https://www.linkedin.com/in/alexander-schrinner/

Felix Kohser: Game Development, Operations

Currently Software Engineer at Keyko

8 Years experience in regulated financial services industries

Game Design + Graphics at Umlaut Games

Linkedin: https://www.linkedin.com/in/felix-kohser-cybersecurity/

Artwork Credits

The images in this white paper are by Archigram, the iconoclastic architectural collective who envisioned cityscapes where technology and environment were indivisible. Based at the Architectural Association in London, the members of Archigram were Peter Cook, Warren Chalk, Ron Herron, Dennis Crompton, Michael Webb and David Greene. Lawrence was a student of Shin Egashira, who was himself taught by David Greene.