

**BLOCKCHAIN LAB** 

DIGITAL WORLDS INSTITUTE UNIVERSITY OF FLORIDA

## ACE - W3

PI: Dr. MARKO SUVAJDZIC

Director of Blockchain Lab at UF Associate Director at Digital Worlds Institute, UF Entrepreneur in Residence at the Entrepreneurship and Innovation Center, UF Associate Professor of Digital Arts and Sciences





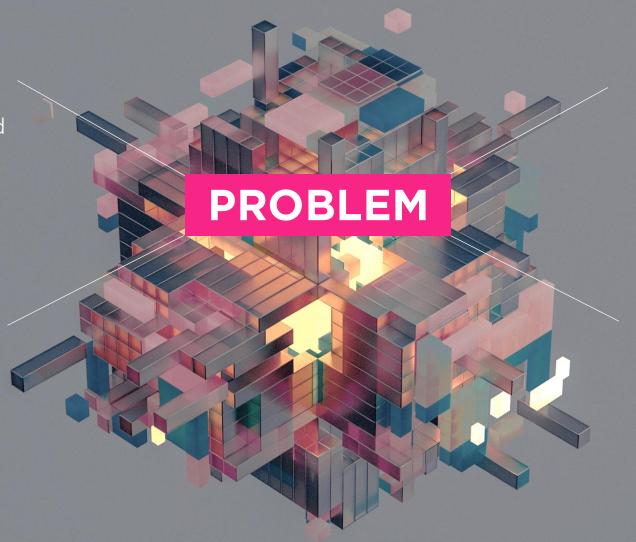
# EXECUTIVE SUMMARY

## **1** education

Lack of existing
Blockchain/ Algorand
education and
developers

ecosystem

Need for Algorand ecosystem growth



projects

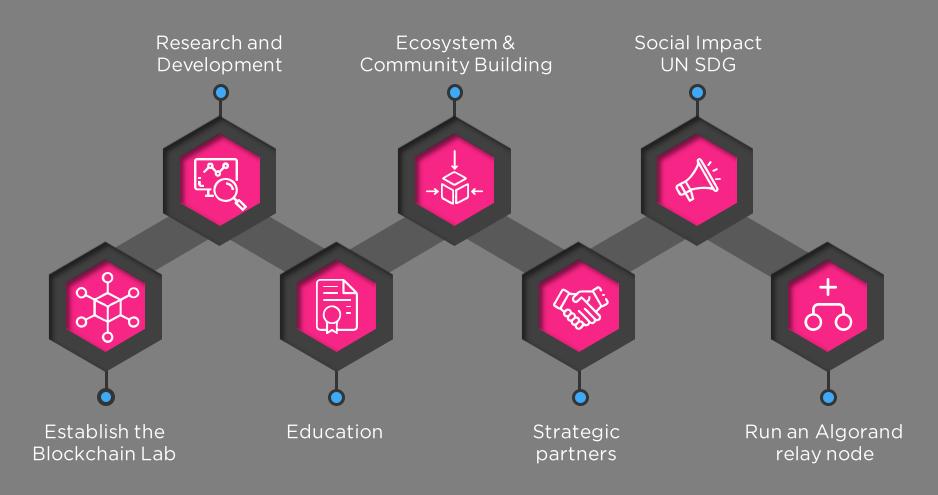
Lack of Algorand based projects in art, media, entertainment, and Web3 space

**1** going global

Underdeveloped blockchain community



#### **SOLUTION APPROACH**



# CORE TEAM University of Florida



Marko Suvajdzic (PI)

is the Associate director of
Digital Worlds Institute at the
University of Florida, and an
Associate Professor in Digital
Arts and Sciences. He is a
diverse thinker with 20+ years
of achievement in academia
and the creative digital
research and production
space. Marko's work has been
featured at Talks at Google,
TedX Salon, and the Game
Developers Conference in San
Francisco.



Tim Difato (CO-PI)

is the Associate Director and an Associate in faculty member at Digital Worlds Institute, University of Florida. Tim runs the various digital media studios located at DW; managing contracts, grants, and special projects. He assists with the diverse research, education, and service initiatives of Digital Worlds. He is an avid woodworker and musician.



Jamie Kraft (CO-I)

is the Director of the
Entrepreneurship and
Innovation Center at the
Warrington College of Business
at the University of Florida.
Jamie came to the Center from
Deloitte Consulting focusing on
economic performance
evaluation, competitive
assessment and strategic
development.



Tom
Shrimpton
(CO-I)

Tom Shrimpton is a professor in the Department of Computer and Information Science and Engineering (CISE) at the University of Florida. His research is in cryptography, with an emphasis on the needs of realworld cryptographic practice.

# CORE TEAM University of Belgrade



#### Aleksandra Labus

Full Professor

ACE role: CO-PI, Chair of the

Blockchain Laboratory

Faculty of Organizational

Sciences, University of

Belgrade.



Marijana Despotović-Zrakić

Full Professor

ACE role: Co-Chair of the

Blockchain Laboratory, Project

manager/Senior

Faculty of Organizational

Sciences, University of

Belgrade.



Zorica Bogdanović

Full Professor

ACE role: Project

manager/Senior, Senior

Researcher

Faculty of Organizational

Sciences, University of Belgrade.



Dušan Barać

Full Professor and the Vice-dean for digital development

ACE role: Project

manager/Senior, Senior

Researcher

Faculty of Organizational

Sciences, University of Belgrade.



# Sub-Award to the UNIVERSITY OF BELGRADE



As a member of the Technology and Engineering Sciences group of the University of Belgrade, the Faculty of Organizational Sciences is a leading higher education and research institution in the field of information technologies and management.

EACH YEAR MORE THAN 700 STUDENTS ENROLL IN THE FACULTY.

#### THE UNIVERSITY OF BELGRADE

# WAS ESTABLISHED IN 1808

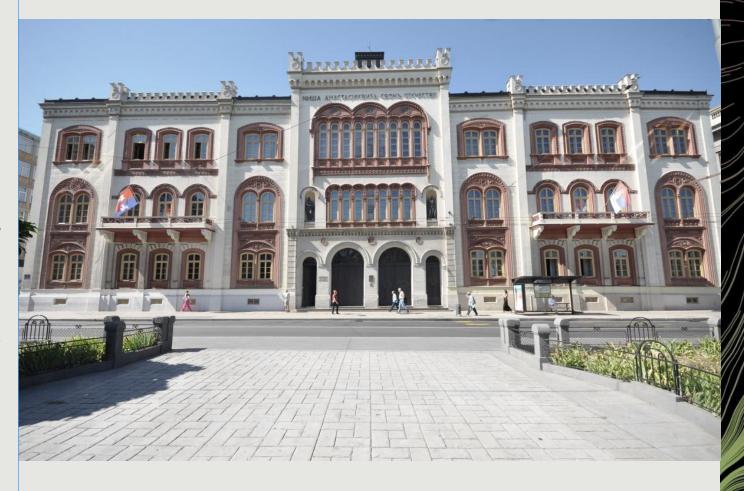
97,700 enrolled students

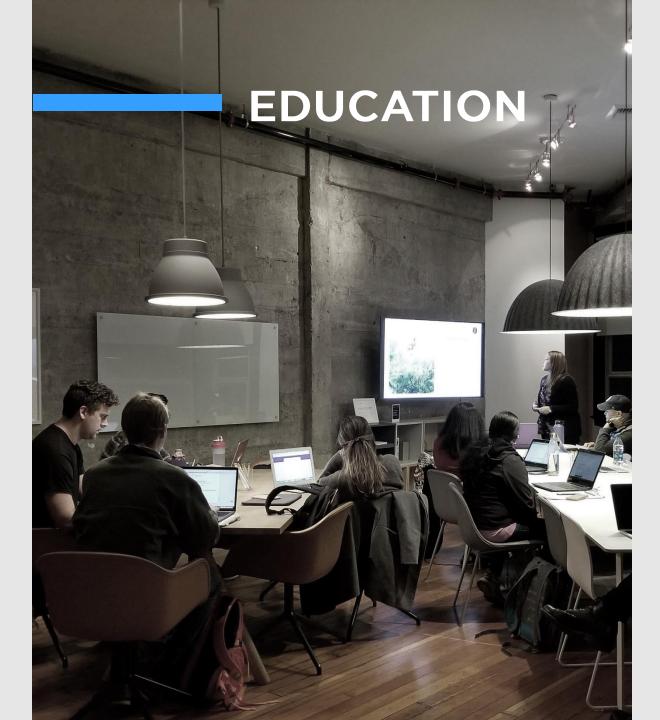
**378,000+** bachelors

14,670 + students with PhD degree

**31** faculties

12 research institutes





#### SCIENTIFIC RESEARCH.

- Organization and implementation of scientific research
- Creation and publication of scientific literature

#### EDUCATION AND WORK WITH STUDENTS.

- Improvement of the curriculum of subjects in the programs of undergraduate, master and doctoral studies
- Improvement of teaching literature
- Organization of summer school

#### COLLABORATION.

 Organizing and participating in events related to blockchain and Algorand technologies

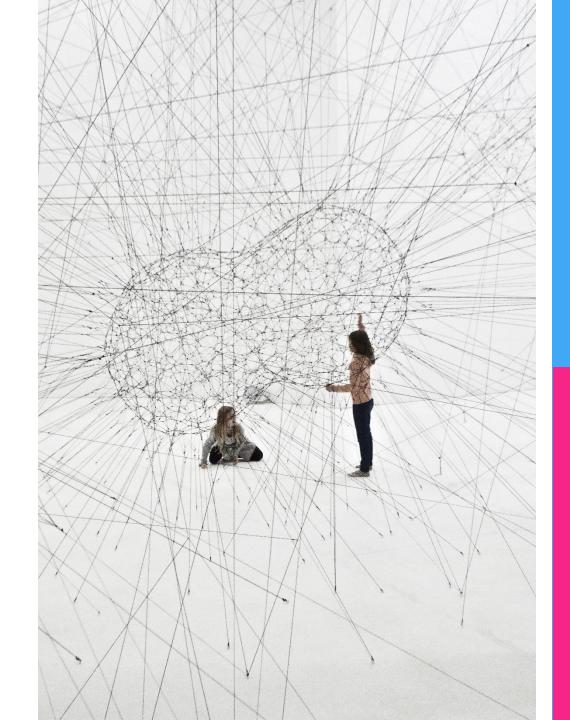


# APPLIED RESEARCH

## APPLIED RESEARCH

Web3 for Art, Entertainment, and Media

This research area seeks to expand **how art is made** on the blockchain with a focus on Algorand technology. Our vision and scope will be implemented in two phases.





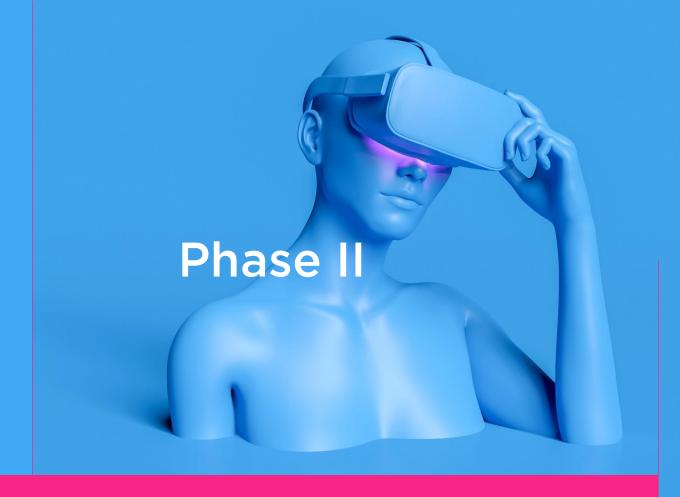




This research examining how artists can use blockchain to make and disseminate art will be conducted and disseminated through a series of educational events presenting the basics of blockchain and creating NFTs.

THESE EDUCATIONAL EXPERIENCES
WILL FOCUS ON THE JOURNEY OF
CREATING NFTS, AS WELL AS
MARKETING AND FINDING SUPPORT
WITHIN COMMUNITIES.





Bring Metaverse art gallery shows, spaces, and workshops to these festivals through integration in talks and also the opportunistic hosting of concurrent events through the on-site Blockchain Lab pop-up.

Focus on scaling our community, bringing our lab to larger art and interactive festivals such as NYCNFT, SXSW, ETH Denver, and Art Basel Miami through community activations and collaborations with art organizations.

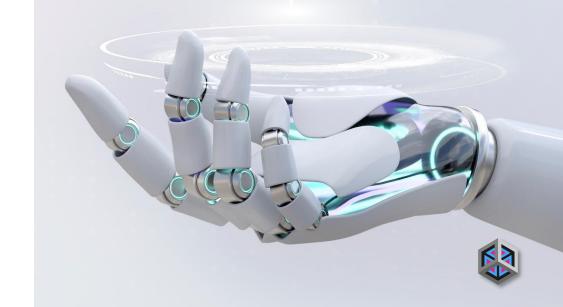


Overarching Research Topic:

# CLIMATE JUSTICE & COMPUTING ON THE BLOCKCHAIN

This research area explores how blockchain development can be done in a more environmentally sustainable way.

Computationally intensive technologies such as blockchain and certain AI methodologies have come under fire for their environmental impact.



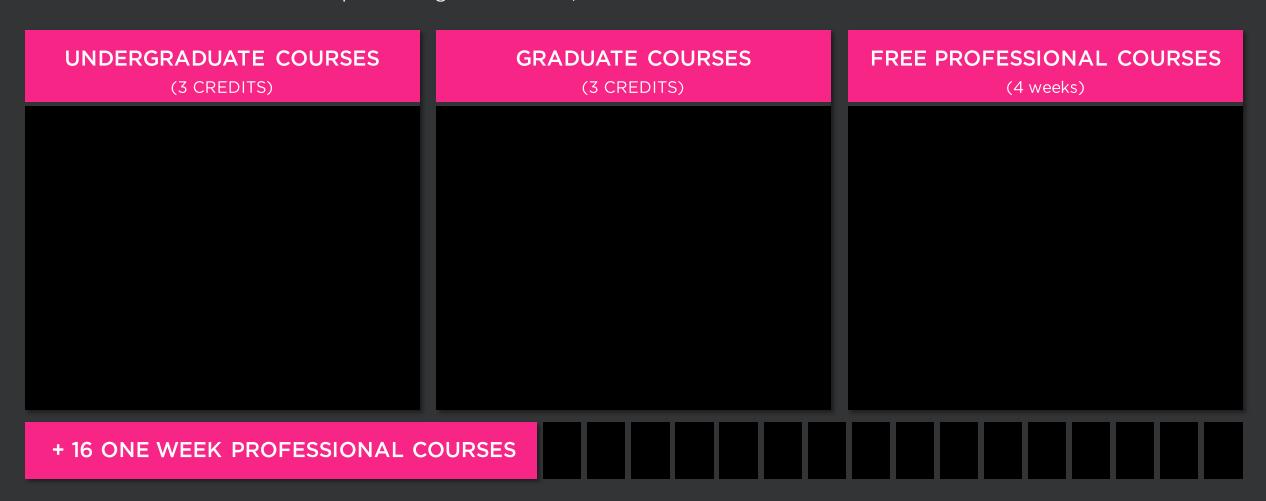
# 05

## **EDUCATION**

UF Blockchain Lab's mission will be to offer accessible and open-source world-class blockchain education to everyone, free of charge.

#### ACE Education Program Output

Over the period of grant duration, we will create a well-rounded set of courses.





# ECOSYSTEM & COMMUNITY BUILDING

To address the lack of Blockchain awareness, Algorand developers, and startups, we will engage in active community building and promotional programs with the goal to create a rich Blockchain community with a special emphasis on Algorand technology. We will build the Blockchain/Algorand ecosystem through a network of interconnected initiatives.







#### Activities

August 12022 - January 2023







## Achievement Highlights

#### 01

We established the very first **Blockchain** research labs at the University of Florida and the University of Belgrade.



### 02

Miami Art Week was a great success for the Blockchain Lab. We presented at the DCentral Miami conference (PI Marko Suvajdzic), attended Web3 Summit, and hosted a half-day program for Florida day at Bitbasel. We had 5 faculty members, and 9 students in Miami. We hosted 3 panel discussions, including the panel on "Blockchain research, education, and community - Powered by Algorand". Mayor Suarez wore the UF Blockchain Lab shirt throughout the whole day of media appearances at Bitbasel.

#### 03

We secured signed MOUs from Landian.io to build an NFT gallery in their Metaverse, and Metacourt AG to implement the Algorand NFT marketplace that will be connected to the Landian Metaverse gallery. Our research faculty, students, and staff will work hand in hand with the developers from Landian and Metacourt to create the research platform that we will be used to onboard artists and audiences, collect data, and analyze the best ways to build such Algornad-based structures in Metaverse.

### 04

We are excited that through building our **Blockchain development course**, we have established collaboration with experts from Algorand, Reach, and the University of Belgrade. This collaboration resulted in Russ Fastino (Algorand), and JP Miller (Reach), visits to UF campus to record educational content. As well as collaboration with the University of Belgrade on building the modules on Pyteal.on).



#### Research

Our research project focuses on creating a Metaverse gallery featuring the Algorand NFT marketplace. Our work over the last six months has occurred on two parallel tracks: conceptualizing the technical infrastructure for the NFT gallery, and conducting the exploratory sessions with our partners on the ideal format for our work.



- Research team building
- Collaboration with Landian
- Collaboration with Metacourt AG
- Grey Area online course
- Serpentine
- Bitbasel
- Miami Dade College

#### **Education**

Our educational efforts have been focused on creating **Blockchain-focused courses**, as well as hosting guest speakers and workshops.

The University of Florida team has finalized the first Blockchain course: Blockchain Innovation in Digital Arts and Sciences.

Two versions have been created:

- 1. **UF Online** for registered UF students
- 2. A FREE Professional Development edition.

Development is currently in its final stages of production and will be completed by February 2023. While building this course, we established collaboration with experts from Algorand, Reach, and the University of Belgrade. This collaboration resulted in Russ Fastino (Algorand), and JP Miller (Reach), visits to UF campus to record educational content. As well as collaboration with the University of Belgrade on building the modules on Pyteal.

The University of Belgrade included modules on Algorand in one of their graduate courses, as well as

- hosted 6 micro lectures
- 3 workshops
- 3 hands-on technical sessions

all focused on Blockchain.



### **Community & Events**

Total number of people attended: 400+

Total number of people engaged: 3000+

#### University of Florida

events and activities from the last six months include:

- Gator Blockchain Student Club conducted 9 meetings in the Fall of 2022
- Introduction to Reach by JP Miller from Reach, in-person (plus studio recording at UF)
- Intersection of Blockchain, XR, and AI (guests from Bitbasel), in-person and online
- 10 students attended the **Reach Bootcamp**. Online Bootcamp + weekly in-person tutoring sessions
- Conference trip for 5 students and two faculty members to the **Florida Bitcoin and Blockchain Summit in Tampa**. We set up our mobile lab there and recorded over 15 interviews with industry experts, in-person

- Conference trip to Miami for 9 students and 5 faculty members. We presented at the DCentral Miami conference (PI Marko Suvajdzic), attended Web3 Summit, and hosted a half-day program for Florida day at Bitbasel.
- Algorand NFT building workshop, in-person and online
- PI Suvajdzic visited the University in Belgrade for **two public guest lectures** and a series of work meetings (In-person and online.)

### **Community & Events**

Total number of people attended: 400+

Total number of people engaged: 3000+

#### University of Belgrade

events and activities from the last six months include:

#### 1.Micro lectures

(all events have been archived, and links are available on our website):

- Blockchain in e-business ecosystems
- Methodology and tools for the creation of NFT collections on the Ethereum blockchain
- The current state of NFTs and how they are made
- HRH Hereditary Prince Philip Karadjordjevic Bitcoin vs Crypto: Understanding
- Blockchain Art, Art about Blockchain, and Blockchain Facilitated Art Markets
- VR in Healthcare

#### 2. Workshops:

- Blockchain in supply chain management
- Risk analysis of the NFT project
- Marketing strategy in NFT projects with the main focus on

#### 3. HandsOn:

- Creating a decentralized wallet and introduction to Solidity
- An introduction to blockchain application development on Solana



# COMMUNITY SUCCESS

### UF Blockchain Lab - Mobile studio

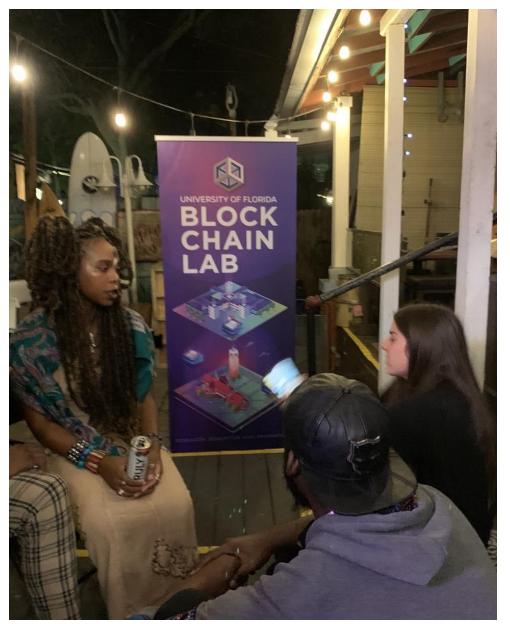














#### Florida Business Blockchain Summit









#### Miami Art Week - Community Building









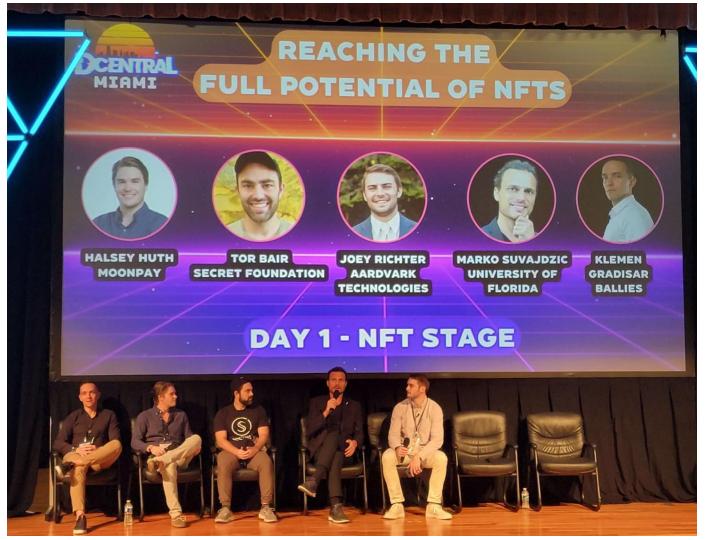




#### Miami Art Week - Florida day at Bitbasel



#### Miami Art Week - Dcentral Miami





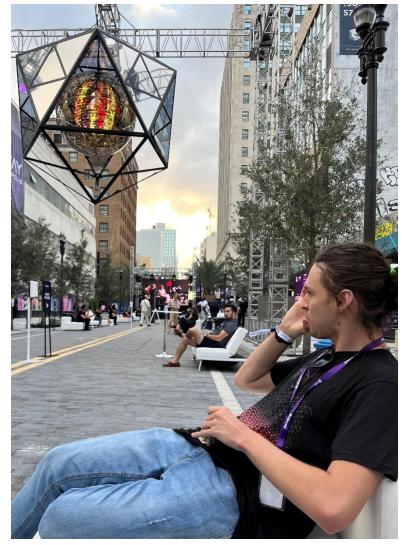
### Miami Art Week











### Student Experience



#### Miami Art Week Web3 Summit

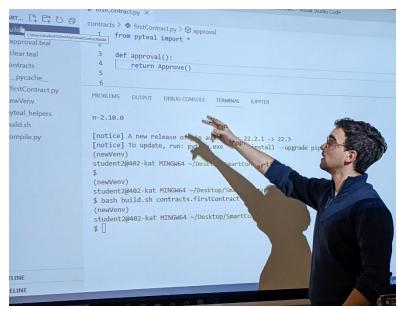












#### University of Belgrade - Lectures, Workshops, Hands On







# THANK YOU!