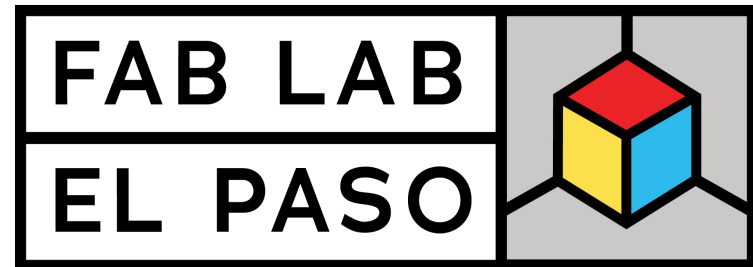


# Going Virtual:

A Fab Lab's Response to  
Stem Distance Learning

# Michael Nelson

Stem Education Manager





# Pre Pandemic



# Steam Hands On Field Trips





# Community Programing

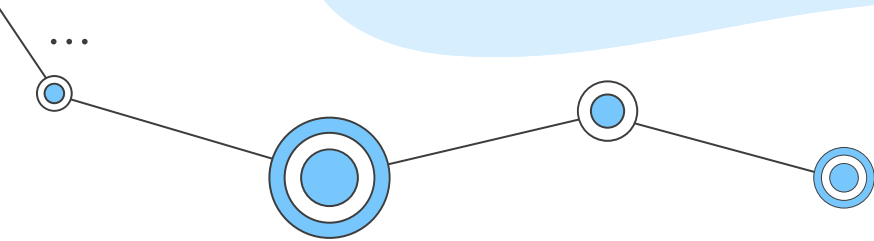
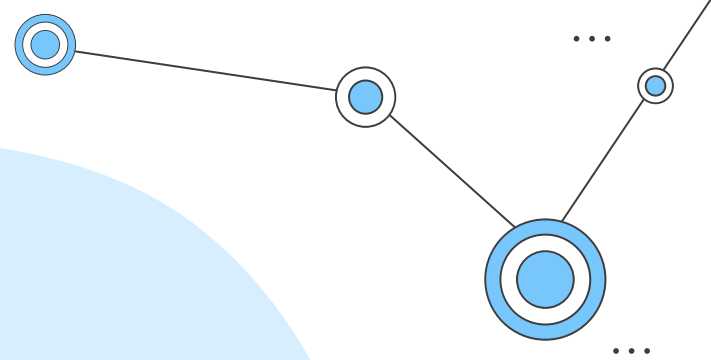


# Mobile Fab Lab





# Lockdown Comense





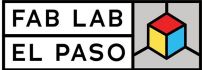




# Pandemic Mode





# Summer/Fall 2020 Virtual Programming



Mark Cuban Foundation's  
**Introduction to  
Artificial Intelligence  
Bootcamp**

Hosted By:

**FAB LAB  
EL PASO**

Learn how Netflix always knows what you want to watch,  
how self-driving cars & smart speakers work, and more!

**FREE**

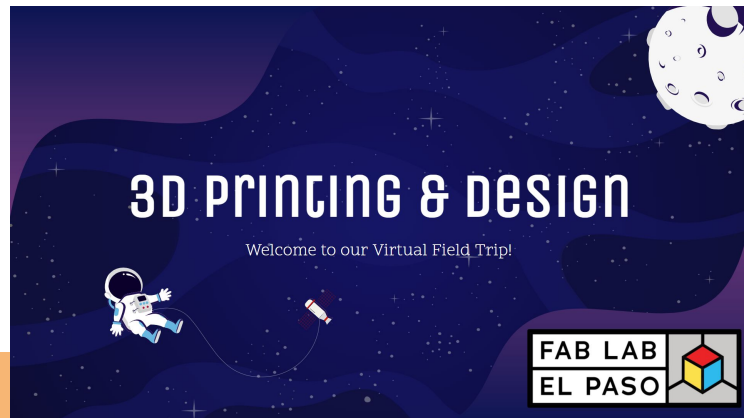
No Computer or  
Programming  
Experience Needed

**Free live online sessions for**  
El Paso high school students,  
taught by faculty from Fab Lab.

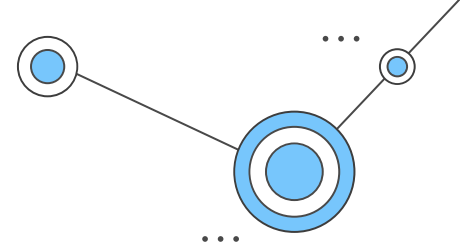
**Saturdays: 10/24, 10/31  
11/7, and 11/14**  
12 PM - 5 PM CST

**Apply Now at [Apply.MarkCubanAI.org](https://Apply.MarkCubanAI.org)**

# Spring 2021 Virtual Programing



# Program Content



## Virtual Reality

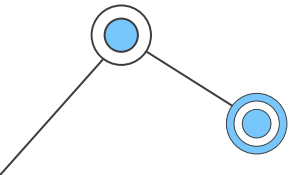
- Virtual Reality/Augmented Reality Concepts
- Developing Environments
- Cospace.edu platform basics
- Future Cities 2121 Prompt
- Collaborative Team Building

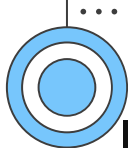
## 3D Printing

- 3D Printing core concepts and workflow
- Applications for 3D Printing
- Space Exploration and Habitat building on Mars
- Design Challenge: Mars Neighbors
- Print students files

## Robotics

- Electric vehicle history
- AI and self driving car technologies
- Machine Learning Exercise
- Remote Robot interaction time
- Philosophical and ethical dilemmas





...

Workshop Car Bot - ARC (Teams)

File Project Options Workspace Help

New Open Merge Save Save As Open Save Cloud Storage Fullscreen Interface RoboScratch (F8) Blockly (F9) Add Remove 1 2 3 Workspaces

Camera

Device Video Tracking Color

Multi Color Motion Object YCbCr Grid

Video Device

Refresh EZB://192.168.5.1:24 [200, 240] Start

Debug

Object Recognition loaded.

Full Screen Processed Pause Detection Hide Settings Tracking

My Mobile Interface

Rev Crash

Hom Hom 2

Vertical Servo

0 Release Center

Ultrasonic n/a

Pause

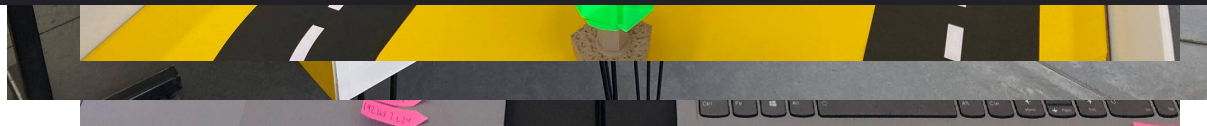
0.00v

Ultrasonic Radar Scan

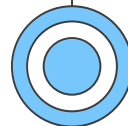
Servo Movement Panel

Stop

Click to use Arrow Keys

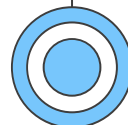
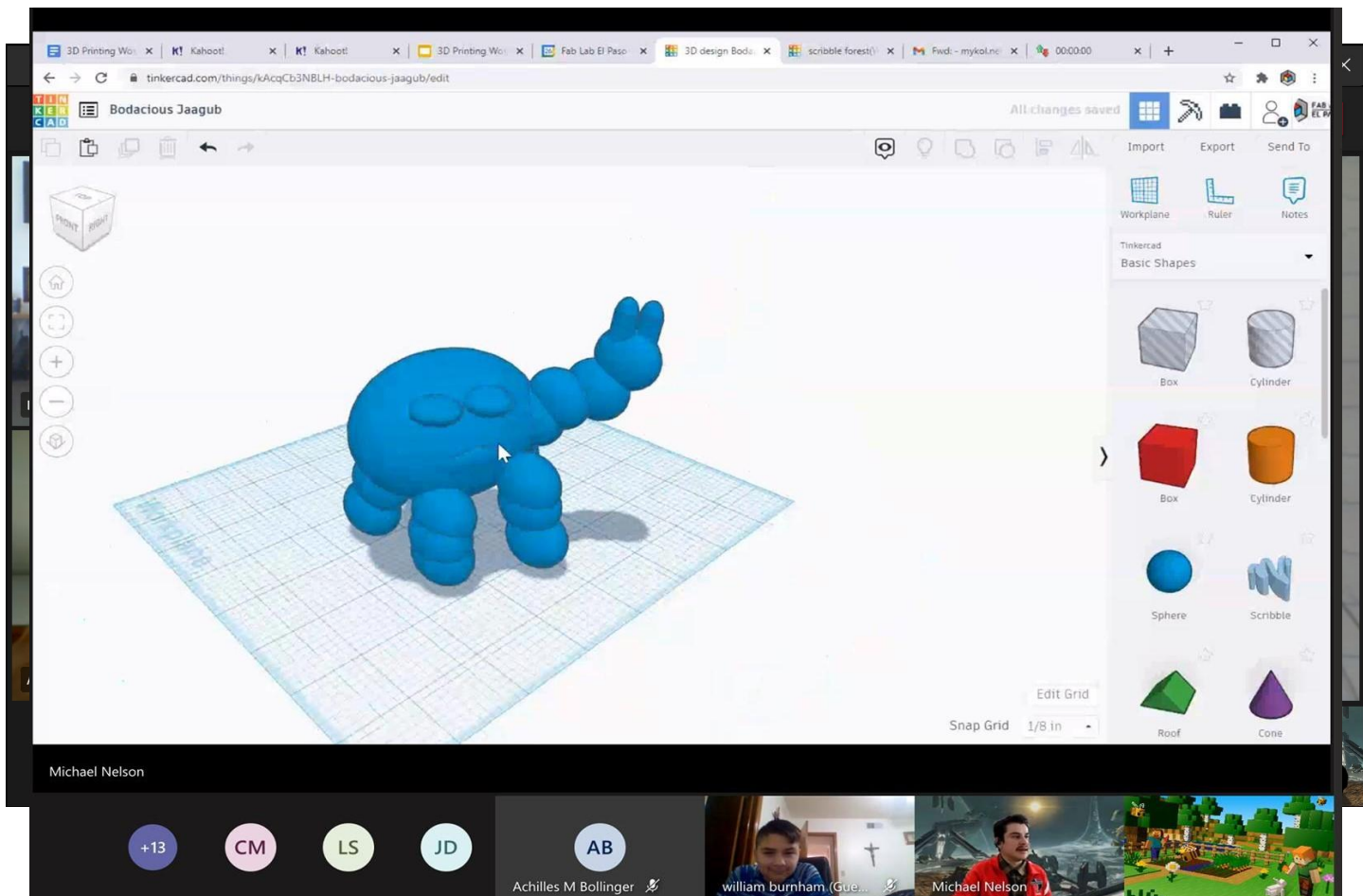
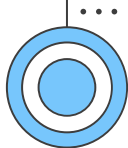


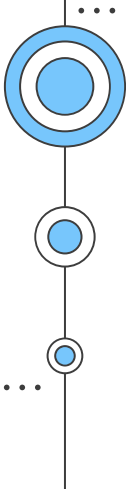
...



...







Request control

Virtual Reality 6-8 - Google Slides  
CoSpaces Edu: Multi-dorama

edu.cospaces.io/Studio/Space/FHNBN5HDT87u18t

Multi-dorama - Multi-dorama

Home Undo Redo Snapping Help Share Code Play

Room1 Room2 Room3 Room4

PHYSICS

4

Run 'Room4' Click 'RedPenguin' to enable physics

\* Physics is enabled both penguins \*

RedPenguin PurplePenguin

When Play clicked

when RedPenguin is clicked

set RedPenguin collisions with other items on

set PurplePenguin collisions with other items on

set animation of RedPenguin to Waddling

move RedPenguin 3 meters forward

in 1 sec.

set animation of RedPenguin to don't animate

PurplePenguin say "Ouch!"

spin PurplePenguin backward with velocity 10

RedPenguin say "Sorry..."

Library Upload Environment

Leslie Sosa

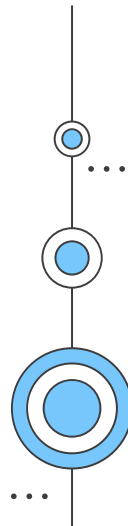
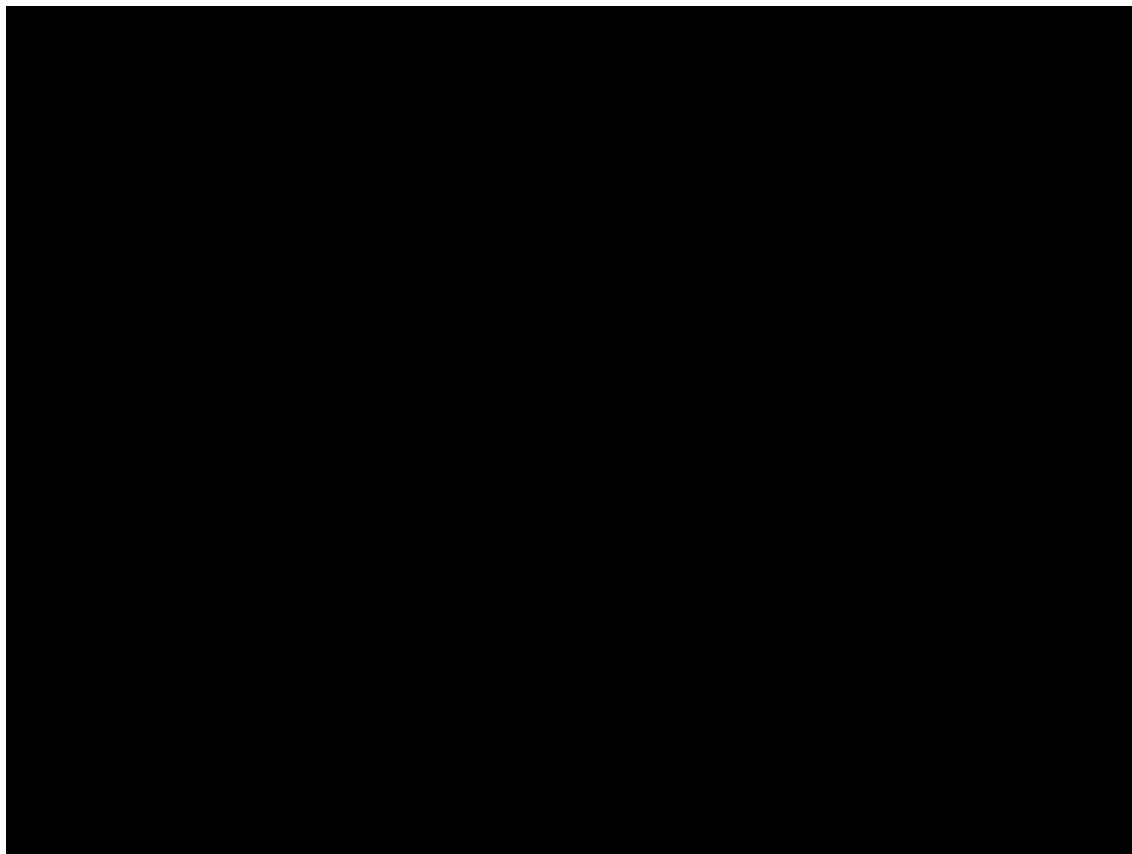
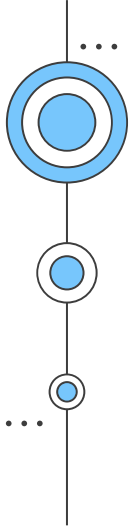
+15 AS LC MN DA JM

David I Alvarado Janie M Montenegro

Leslie Sosa

12:52 PM 3/4/2021





# Summer 2021







**What's next?**

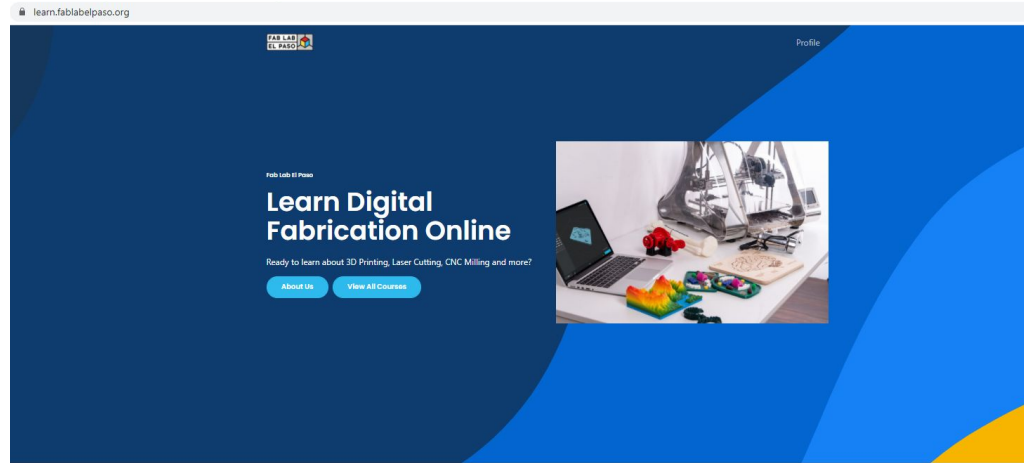


The image features a light blue, cloud-like shape in the center. Inside this shape, the text "What's next?" is written in a bold, dark grey font. Surrounding the central shape is a decorative network diagram. This diagram consists of several blue circular nodes, each with a white center and a blue outer ring. These nodes are connected by thin grey lines. In the top right corner, a path of three nodes leads to a larger, more prominent node, with three dots indicating a continuation of the path. In the bottom left corner, a path of four nodes is shown, with three dots indicating a continuation of the path. The overall design is clean and modern, with a focus on the central question.

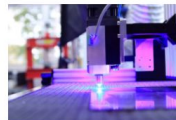
# Fall 2021- Spring 2022



# Launch of our new E-Learning Platform



3D PRINTING  
[View all 3D Printing Courses →](#)



Laser Cutting  
[View all Laser Cutting Courses →](#)



CNC Milling  
[View all CNC Milling Courses →](#)

# Thanks!

Any questions?



@fablabelpaso

#fablabep

#elpasomakerspace

mnelson@fablabelpaso.org

915.209.2656

fablabelpaso.org

**CREDITS:** This presentation template was created by [Slidesgo](#), including icons by [Flaticon](#), infographics & images by [Freepik](#) and illustrations by [Stories](#)



# Instructions for use

In order to use this template, you must credit [Slidesgo](#) by keeping the **Thanks** slide.

## You are allowed to:

- Modify this template.
- Use it for both personal and commercial projects.

## You are not allowed to:

- Sublicense, sell or rent any of Slidesgo Content (or a modified version of Slidesgo Content).
- Distribute Slidesgo Content unless it has been expressly authorized by Slidesgo.
- Include Slidesgo Content in an online or offline database or file.
- Offer Slidesgo templates (or modified versions of Slidesgo templates) for download.
- Acquire the copyright of Slidesgo Content.

For more information about editing slides, please read our FAQs or visit Slidesgo School:

<https://slidesgo.com/faqs> and <https://slidesgo.com/slidesgo-school>

