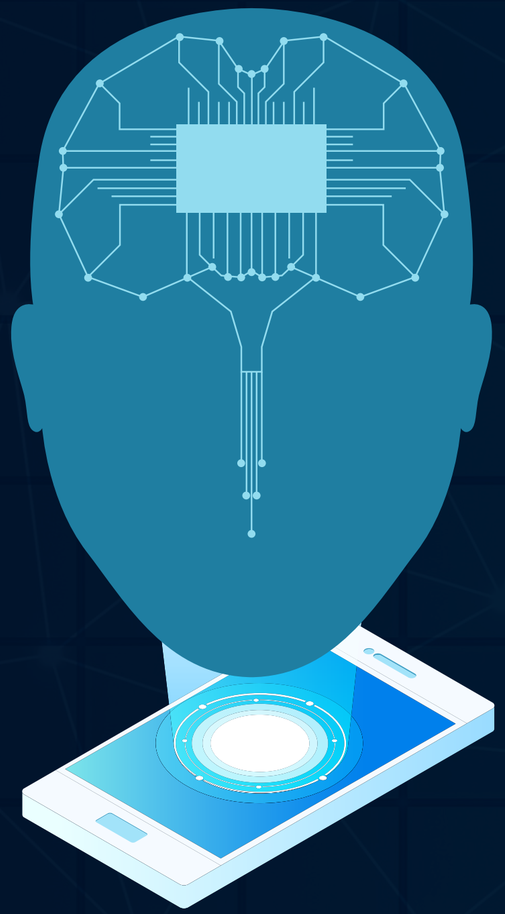


MEDILAB3

ZKML Medical Research Application

01

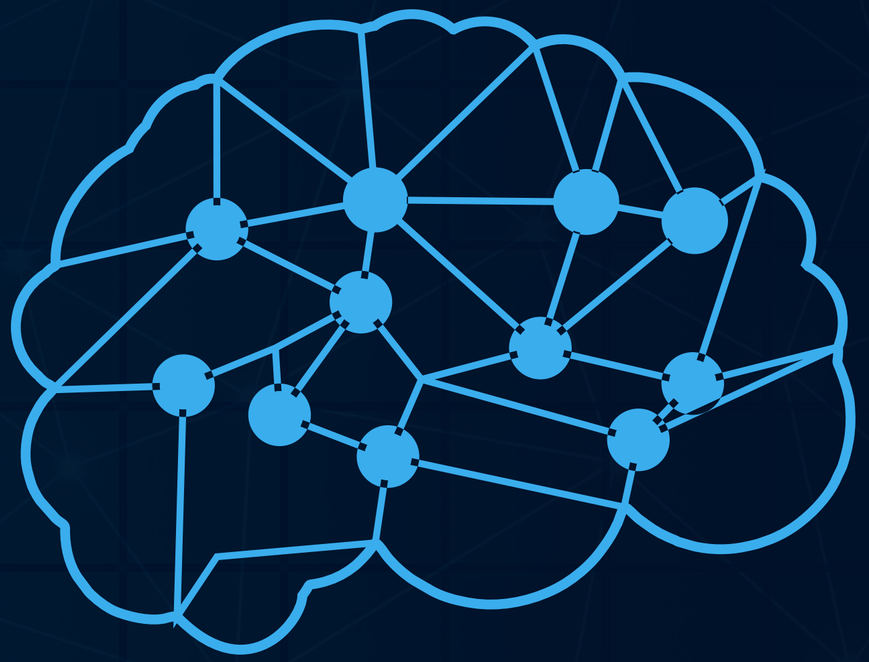
PROBLEM

DATA COLLECTION:

Gathering medical information from patients at hospitals or private clinics can be a cumbersome or intricate process.

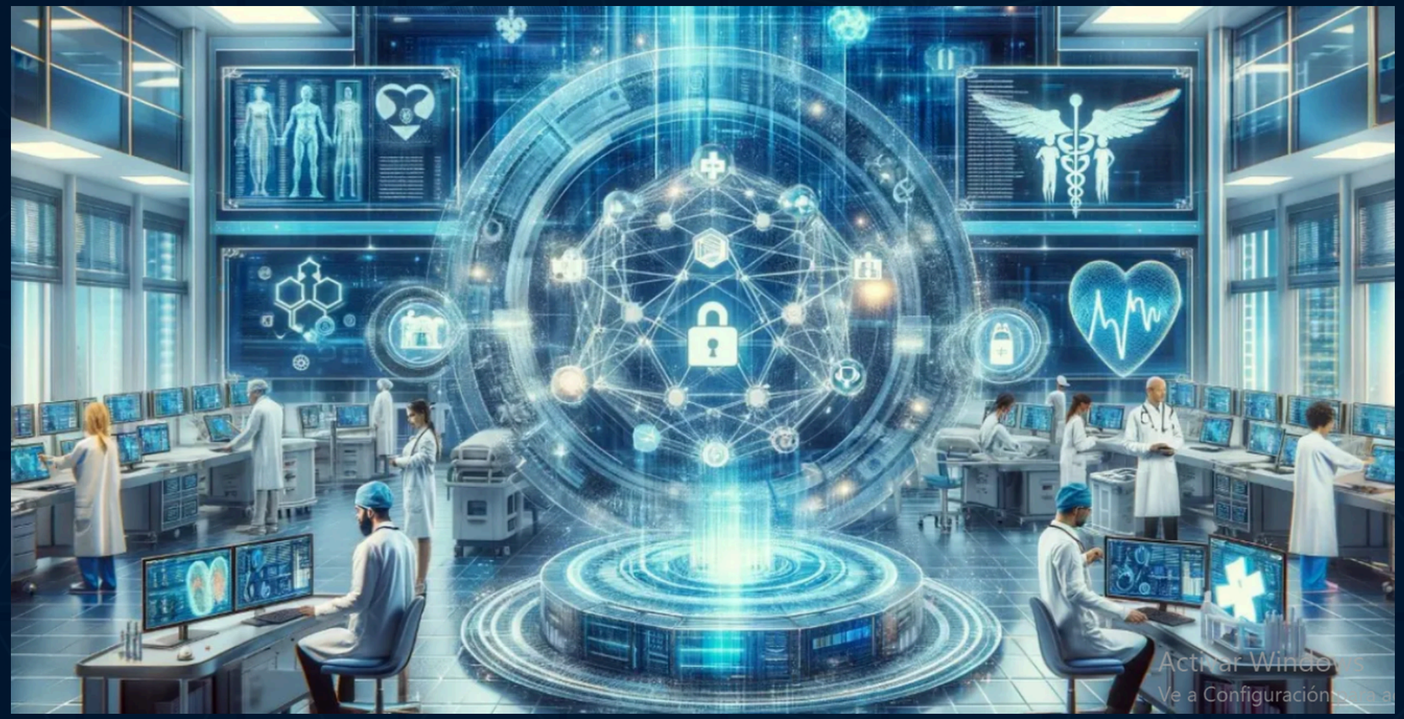
DATA SHARING:

Due to the sensitive nature of patient data, sharing it with different research centers can be restricted or patients refusal to participate in studies



WHAT WE ARE

A ZKML proof system aiding medical researchers



MODEL EXAMPLE

We would create an application where medical practicioners input the patient data and whether or not they tested positive for dengue input into a csv file, the data of the location and whether or not a patient has dengue would then be compared to the participation in Buenos Aires while leaving all of the personal information out.

Week	Dengue Case	Average Percipitation
1	41	4.114285543
2	91	0.514285571
3	110	5
4	125	5.971428429
5	230	1.971428557
6	428	0.6285714286
7	730	2.328571429
8	1241	1.5428572
9	1604	2.942857007
10	1722	3.528571443
11	1900	2.257143
12	1679	2.371428543
13	1935	4.742857243
14	2146	0.9714285714
15	1725	1.683333283

SOLUTION

1

- **Our ZERO KNOWLEDGE decision tree model allows for verified proof results based on information provided by medical professionals**
- **This models provides the information needed for researches while leaving out sensitive information like names and contact information**

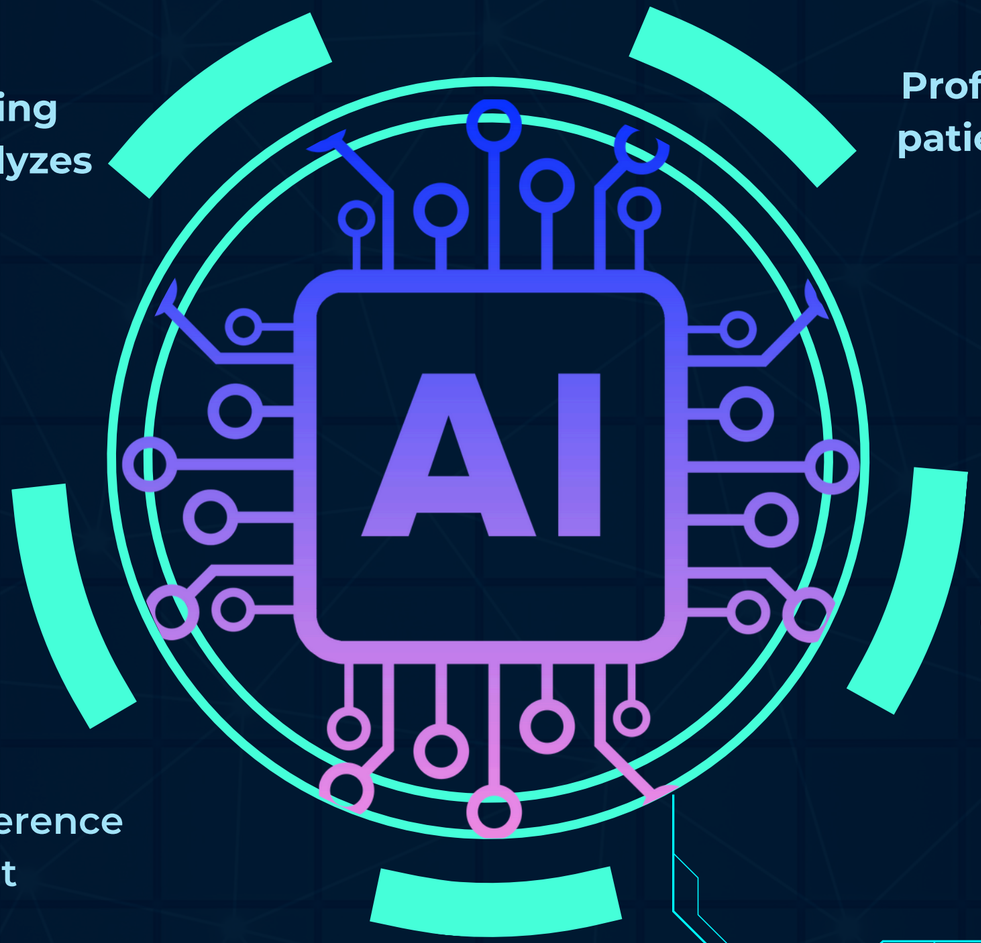
2

- This information is then verified and put on the Starknet chain
- Machine Learning with parameters set out by researchers will analyze the results

3

- This will not only aim satisfy legal and moral concerns regarding the privacy of patients data but will allow for a more accurate and streamline study

2 OUR PROCESS



Medical Professionals input patient information

We create and train a Decision Tree Model

Convert the Model to ONNX Format

Transpile the model to Orion Cairo

Deploy an inference endpoint

Run a verifiable inference in AI Actions on Giza

Upload Proof on Starknet

Machine Learning applications analyzes information

THE FUTURE
ML & AI

3 INNOVATIONS

BACK END

Python, Onnx,
Cairo Giza

FRONT END

Java Script , html,
css

CHAIN

STARKNET

OUR TEAM

NATALYA GONZALEZ
CTO

MATTHEW GLEZOS
Tech/Stragety

ANTHOANED ZAVALA
Full Stack