

NUMERAI

# What is Numerai?

The hardest data science tournament on the planet.

$39,669,149 paid out.

# Start with hedge fund quality data.

It is clean and regularized, designed to be usable right away. Obfuscated, so it can be given out for free.

**/download-dataset**

| id | era | feature1 | . . . | feature1050 | target |
|---|---|---|---|---|---|
| n2b2e3dd163cb422 | era1 | 0.75 | . . . | 0.00 | 0.25 |
| n177021a571c94c8 | era1 | 1.00 | . . . | 0.25 | 0.75 |
| n7830fa4c0cd8466 | era1 | 0.25 | . . . | 1.00 | 0.00 |
| nc584a184cee941b | era1 | 0.25 | . . . | 0.00 | 1.00 |
| nc5ab8667901946a | era1 | 0.75 | . . . | 0.25 | 0.25 |
| n84e624e4714a7ca | era1 | 0.00 | . . . | 0.75 | 1.00 |

# Apply machine learning to predict the stock market.

Build a model using the example Python and R scripts. Everything you need to get started in one package.

**/clone-example-scripts**

```python
# !/usr/bin/env python
"""Example ML model on Numerai data using xgboost regression."""

import pandas as pd
from xgboost import XGBRegressor

# training data contains features and targets
training_data = pd.read_csv("numerai_training_data.csv").set_index("id")

# tournament data contains features only
tournament_data = pd.read_csv("numerai_tournament_data.csv").set_index("id")
feature_names = [f for f in training_data.columns if "feature" in f]

# train a model to make predictions on tournament data
model = XGBRegressor(max_depth=5, learning_rate=0.01, \
                     n_estimators=2000, colsample_bytree=0.1)
model.fit(training_data[feature_names], training_data["target"])

# submit predictions to numer.ai
predictions = model.predict(tournament_data[feature_names])
predictions.to_csv("predictions.csv")
```

# Submit your predictions to control the capital of the Numerai hedge fund.

Build reputation to claim your place on the leaderboard. Stake on your model to earn cryptocurrency.

**/rules-and-payouts**

| id | prediction |
|---|---|
| n60dffdaceb7e467 | 0.25 |
| nadaeef0214b84a8 | 1.00 |
| nb13883520a4344f | 0.25 |
| n423766c5a4fa42a | 0.75 |
| n252b14301e46a31 | 0.25 |
| n75a5baf93a624cc | 0.00 |
| n2ff91086716e413 | 1.00 |

# Join the network and build the world’s last hedge fund.

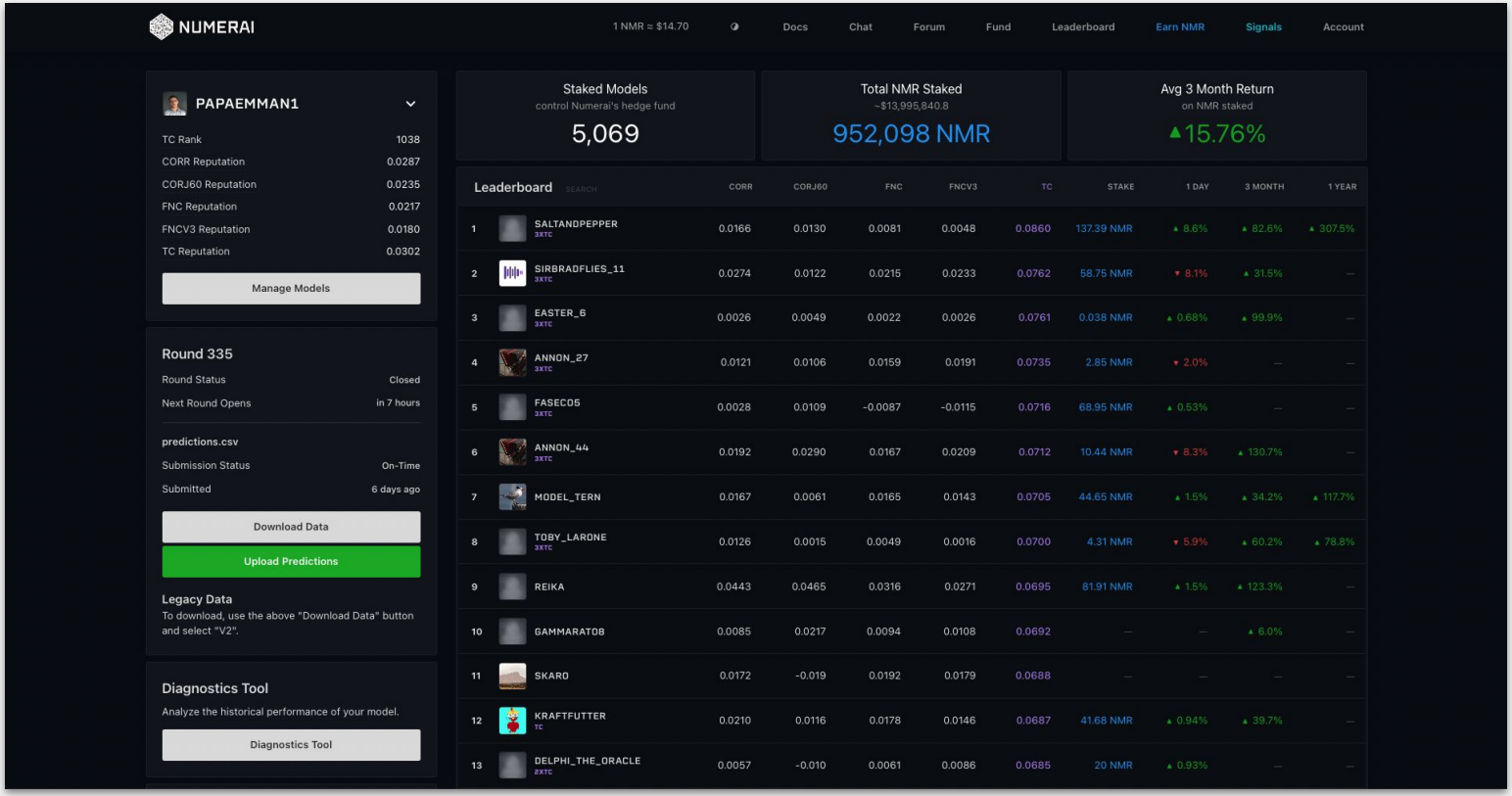
Backed by Union Square Ventures, the co-founder of Renaissance, and the cofounder of Coinbase.

Still confused? 

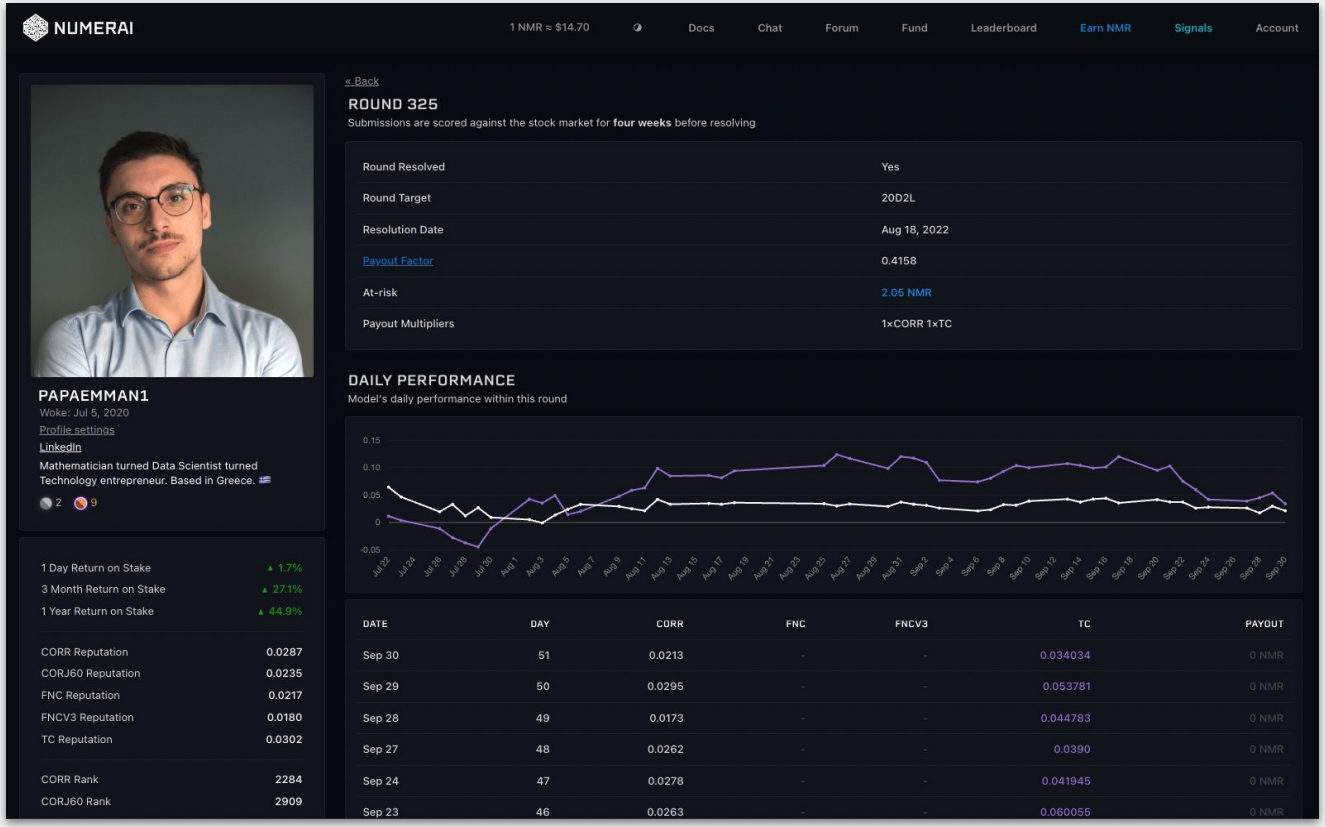
# Numerai is made of three players

1. Data science tournament
2. Data scientists
3. Numerai Hedge Fund

# Numerai Leaderboard



# Numerai Weekly Round



The Securities and Exchange Commission has not necessarily reviewed the information in this filing and has not determined if it is accurate and complete.
The reader should not assume that the information is accurate and complete.

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549
**FORM D**

**Notice of Exempt Offering of Securities**

| OMB APPROVAL | |
|---|---|
| OMB Number: | 3235-0076 |
| Estimated average burden hours per response: | 4.00 |

**1. Issuer's Identity**

CIK (Filer ID Number)
0001667103

Previous Names [X] None

Name of Issuer
Numerai Fund 1, LP

Jurisdiction of Incorporation/Organization
DELAWARE

Year of Incorporation/Organization
[ ] Over Five Years Ago
[X] Within Last Five Years (Specify Year) 2015
[ ] Yet to Be Formed

Entity Type
[ ] Corporation
[X] Limited Partnership
[ ] Limited Liability Company
[ ] General Partnership
[ ] Business Trust
[ ] Other (Specify)

**2. Principal Place of Business and Contact Information**

Name of Issuer
Numerai Fund 1, LP

Street Address 1
404 BRYANT STREET

Street Address 2

City
SAN FRANCISCO

State/Province/Country
CALIFORNIA

ZIP/PostalCode
94107

Phone Number of Issuer
415-968-6006

**3. Related Persons**

Last Name
Numerai, LLC

First Name
N/A

Middle Name

Street Address 1
404 Bryant Street

Street Address 2

City
San Francisco

State/Province/Country
CALIFORNIA

ZIP/PostalCode
94107

Relationship: [X] Executive Officer [ ] Director [ ] Promoter

Clarification of Response (if Necessary):
The General Partner of the Issuer.

Last Name
Craib

First Name
Richard

Middle Name

Street Address 1
404 Bryant Street

Street Address 2

City
San Francisco

State/Province/Country
CALIFORNIA

ZIP/PostalCode
94107

# What does the Numerai hedge fund do?

1. Takes the models (just predictions) from data scientists
2. Combines them together to create a Meta-Model
3. Trades this Meta-Model on the Stock Market
4. Rewarding participants in crypto based on their performance

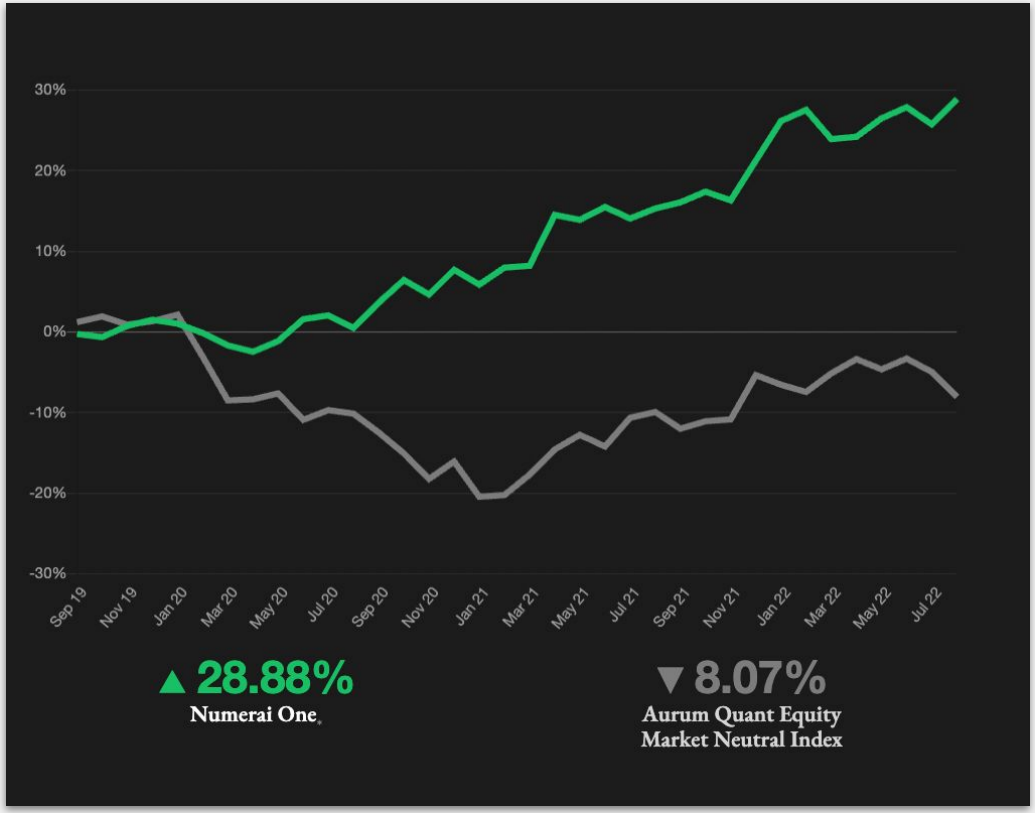
Richard Craib

Oct 24, 2019 · 7 min read · Listen

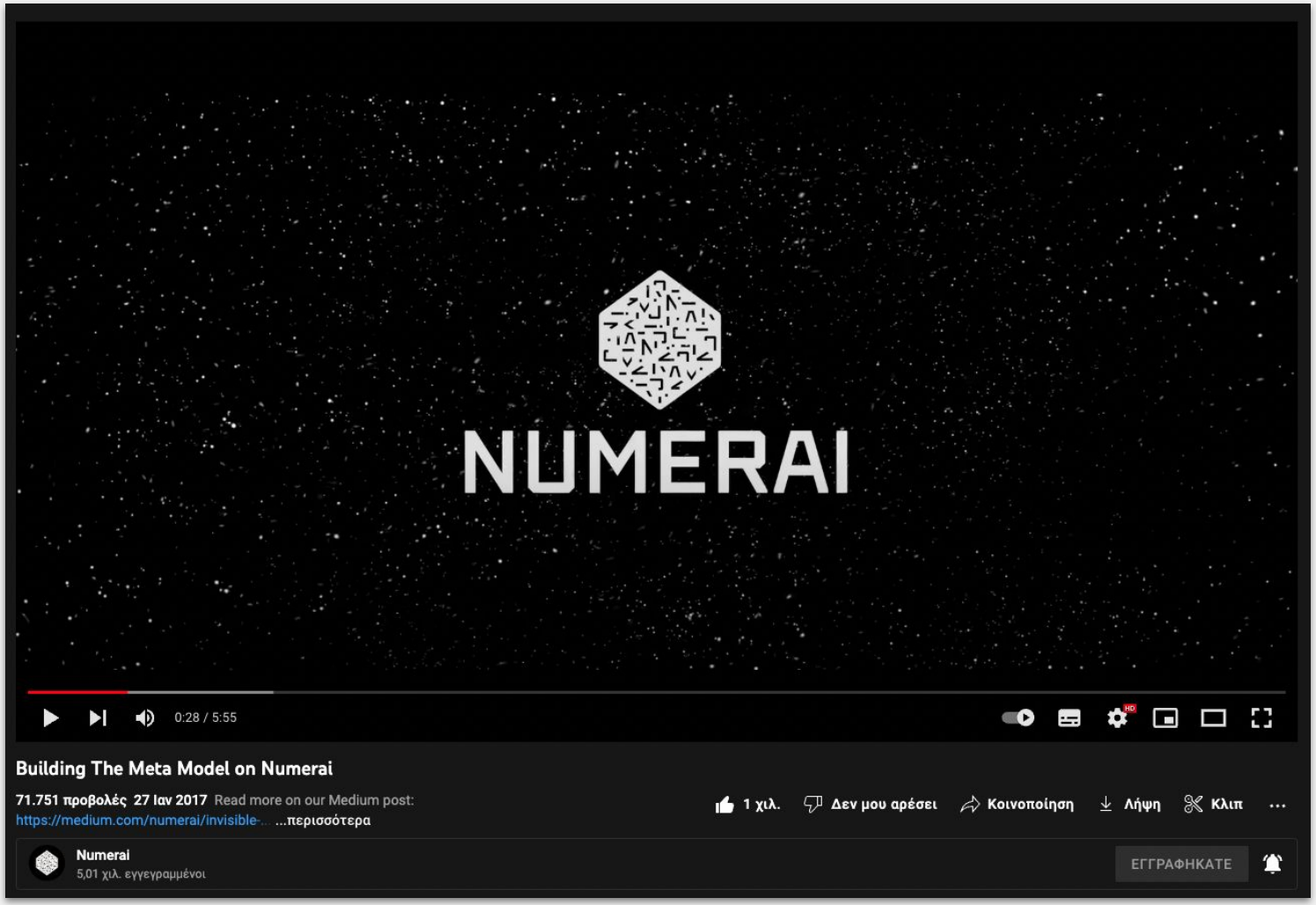



# Achieving Meta Model Supremacy At Numerai

# Numerai hedge fund performance




https://numerai.fund/




https://www.youtube.com/watch?v=dhJnt0N497c

# Numerai is made of three participants

1. Data science tournament ✅
2. Data scientists ✅
3. Numerai Hedge Fund ✅

# Richard Craib (Founder of Numerai)

- Studied Mathematics & Economics at UC Berkeley & Cornell
- Created multiple startups prior to Numerai
- Worked as a quant at a hedge fund
- Born in South Africa



https://twitter.com/richardcraib?lang=en

# Paying Data Scientists (early days)

1. Initially tried PayPal - Epic fail 💥 😵
2. Then they used Bitcoin in 2016



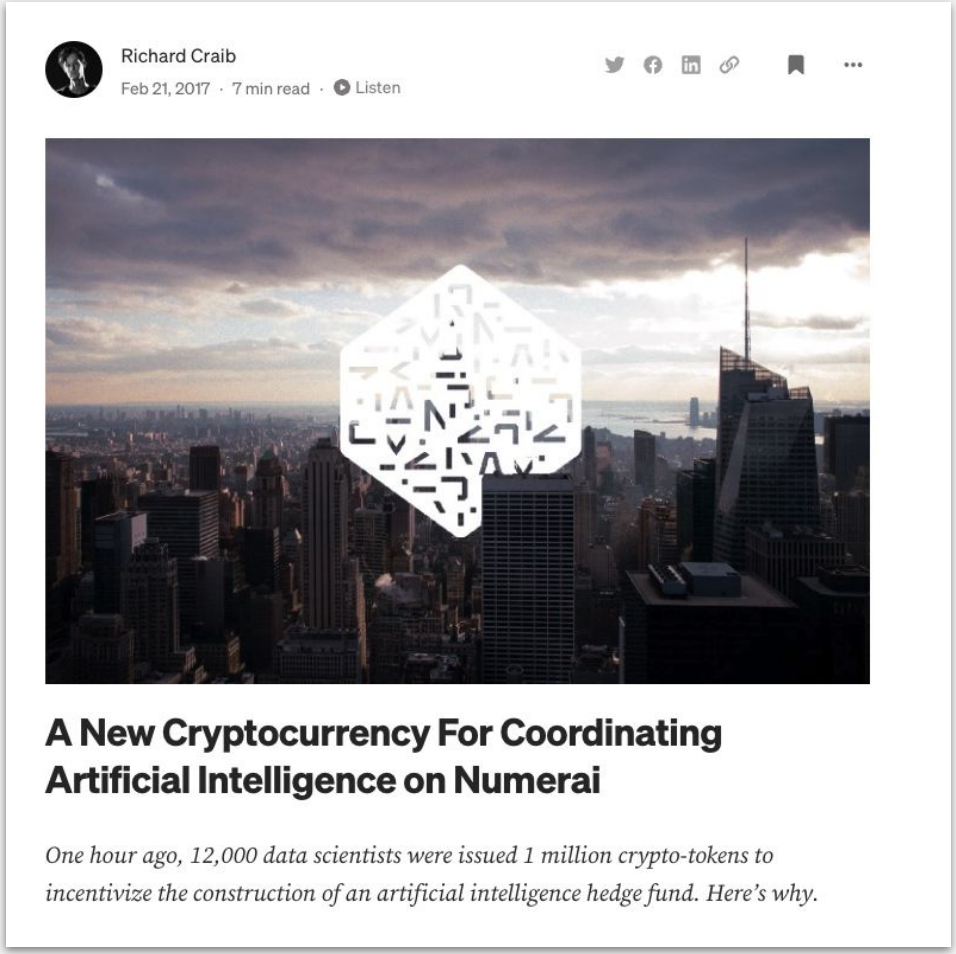
CADE METZ BUSINESS DEC 12, 2016 7:00 AM

## 7,500 Faceless Coders Paid in Bitcoin Built a Hedge Fund's Brain

They can't see his data. He can't see them. But Richard Craib believes the blind can lead the blind to a better hedge fund.

https://www.wired.com/2016/12/7500-faceless-coders-paid-bitcoin-built-hedge-funds-brain/

# Numeraire (NMR)



Richard Craib

Feb 21, 2017 · 7 min read · Listen

## A New Cryptocurrency For Coordinating Artificial Intelligence on Numerai

*One hour ago, 12,000 data scientists were issued 1 million crypto-tokens to incentivize the construction of an artificial intelligence hedge fund. Here's why.*

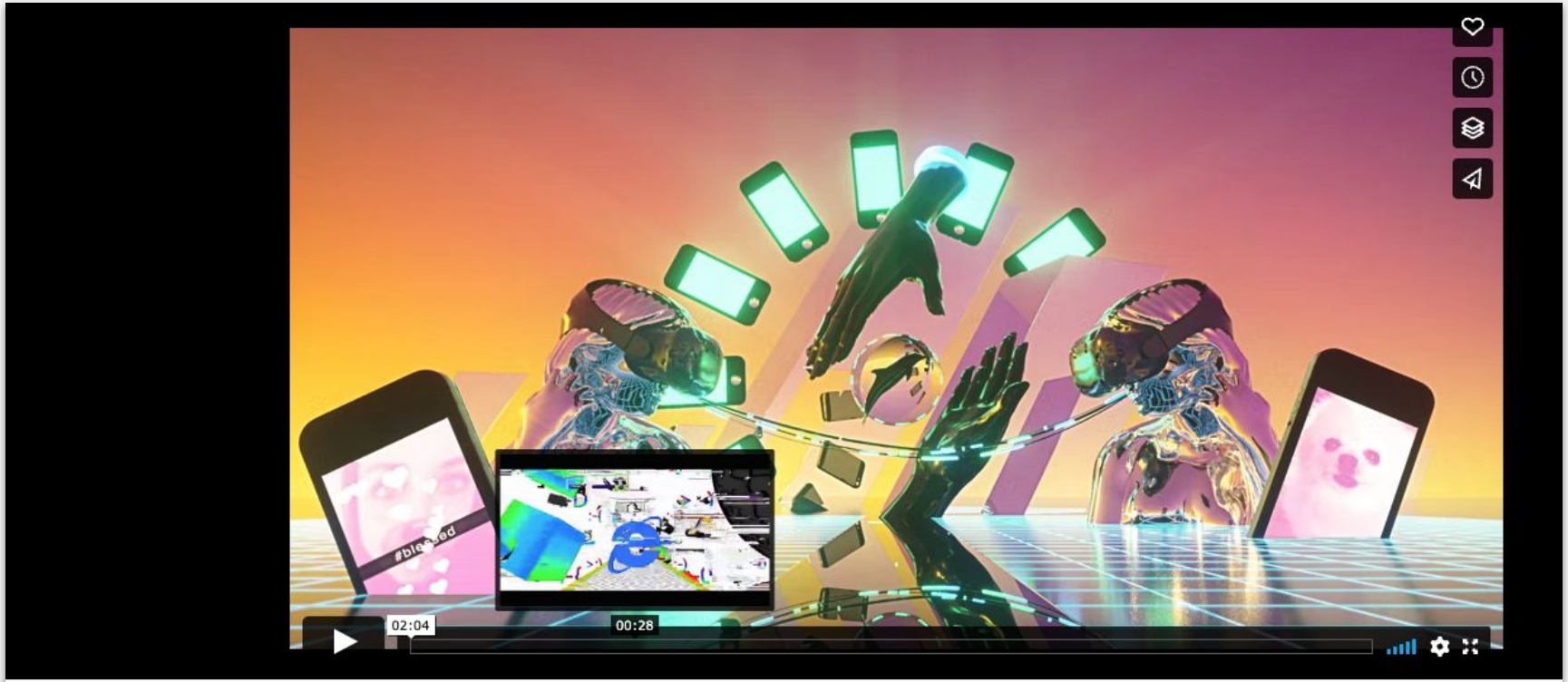
https://medium.com/numerai/a-new-cryptocurrency-for-coordinating-artificial-intelligence-on-numerai-9251a131419a

# Paying Data Scientists (today)

## Created Numeraire (NMR)

- Mined by submitting successful submission to the weekly tournament
  - Staked predictions can be burned
  - Staked predictions produce better results than non-staked predictions
- Creates network effects for the NUmerai hedge fund, which no hedge fund has done before

https://www.wired.com/2016/12/7500-faceless-coders-paid-bitcoin-built-hedge-funds-brain/




# Introducing Numeraire

5 years ago | More

Numerai PRO ✓ Following

https://vimeo.com/205032211

# Erasure



ERASURE

## SO MUCH **MORE_**

> “Erasure solves the problem of bad information online. What would Reddit look like if users had something real to lose for every post, would troll farms be able to manipulate it as easily? What if you could burn a publication’s stake for promoting fake news, or an advertiser for misleading consumers? Can Erasure help manage the threat of deep-fakes? It may be that the only way to distinguish good from bad information online may come down to how much value its creator stakes behind it. That’s the vision of this protocol.”
>
> — Placeholder VC Thesis

We won’t reach this world of the future alone. Join us in making it.

GITHUB MEDIUM TWITTER

https://erasure.world/

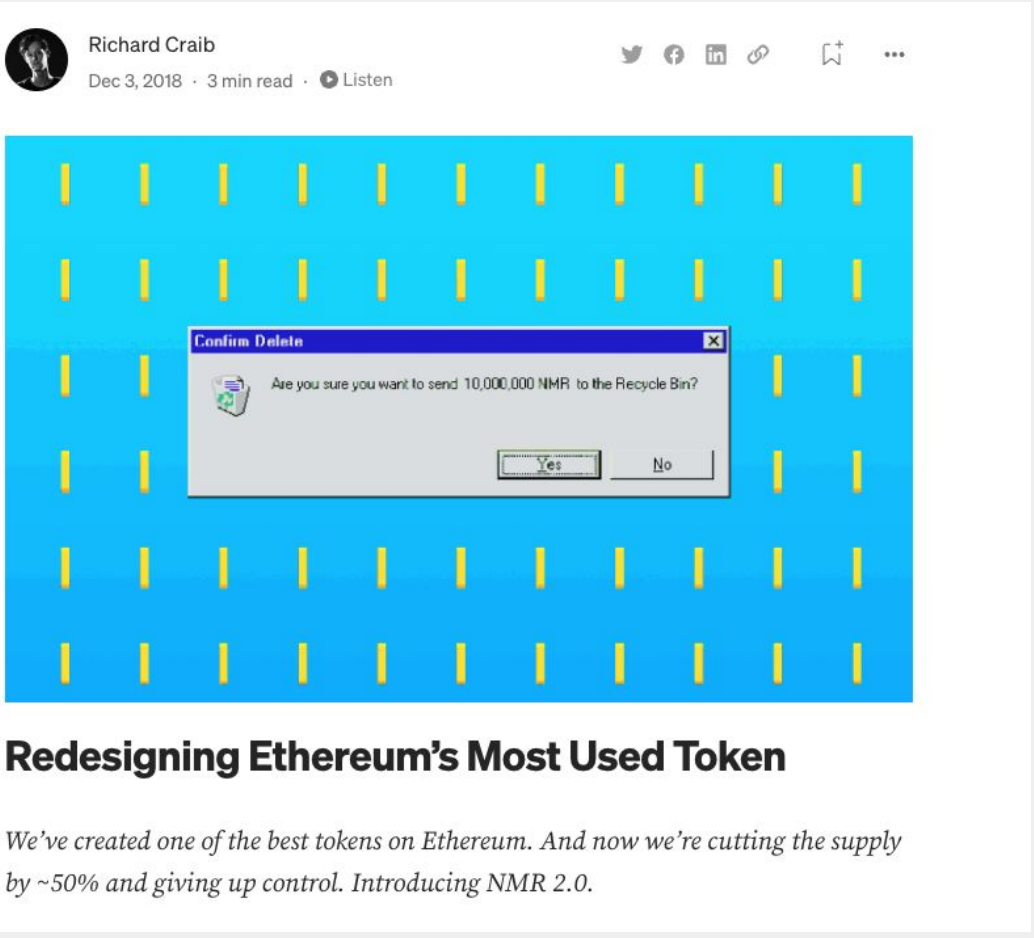
# Why Erasure?

1. Helps to decentralize Numeraire (NMR)
2. Makes Erasure a platform to build on

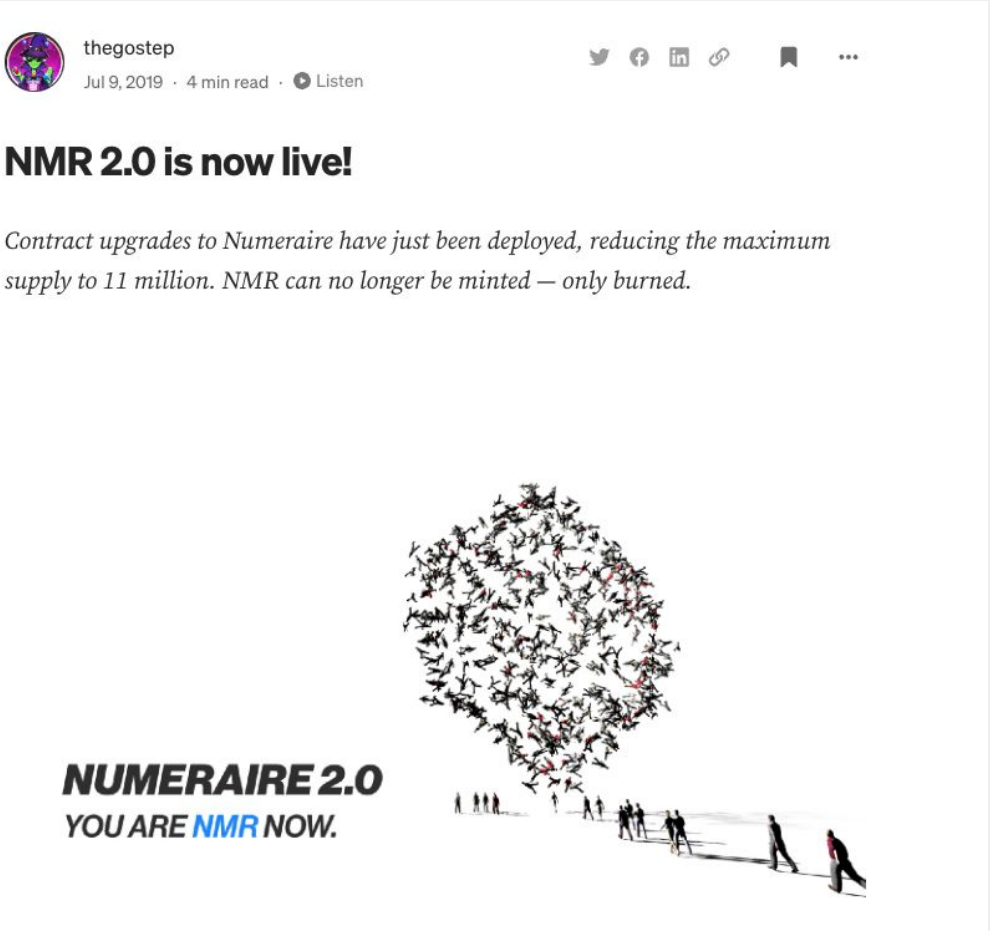
# Decentralizing Numeraire (NMR)

But NMR has a problem; it is a token designed just for Numerai. Only Numerai data scientists use NMR for staking, only Numerai can buy predictions and destroy stakes, and all prediction datasets need to be uploaded to Numerai's servers. In a word, NMR is *centralized* — and that's bad because it limits NMRs potential. But today we are announcing that **we are decentralizing NMR** by making NMR the native token of Erasure.

https://medium.com/numerai/numerai-reveals-erasure-unstoppable-peer-to-peer-data-feeds-4fbb8d92820a




https://medium.com/numerai/redesigning-ethereums-most-used-token-96c9fa885352




https://medium.com/numerai/nmr2point0-66a45a9a5e70

# Erasure as a platform / Numerbay

https://numerbay.ai/

https://docs.numerbay.ai/

https://medium.com/numerai/introducing-erasure-quant-963e8e74c80c

NumerBay

Search item here...

Home | Numerai | Signals | Docs



# PAPAEMMAN9

Round 336 • numerai-predictions •
Sold 0

@papaemman
Owner

Buy

| | |
|---|---|
| 1 Day Stake Return | 0.59% |
| 3 Month Stake Return | 25.54% |
| 1 Year Stake Return | -% |
| NMR Stake | 4.00 NMR |

| | |
|---|---|
| CORR Reputation | 0.0154 |
| CORR60 Reputation | 0.0230 |
| FNC Reputation | 0.0149 |
| FNCv3 Reputation | 0.0135 |
| TC Reputation | 0.0648 |

## Recent Performance




## Recent Rounds

| Round | At-risk | Stake Type | CORR | CORJ60 | FNCV3 | TC | Payout |
|---|---|---|---|---|---|---|---|
| 335 | 4.00 NMR | 2xTC | 0.0205 | - | 0.0307 | -0.0001 | -0.00 NMR |
| 334 | 4.00 NMR | 2xTC | -0.0042 | - | -0.0013 | 0.1131 | +0.32 NMR |
| 333 | 0.00 NMR | 2xTC | -0.0137 | - | 0.0032 | 0.0254 | 0.00 NMR |
| 332 | 0.00 NMR | 2xTC | -0.0204 | - | -0.0039 | 0.0281 | 0.00 NMR |
| 331 | 0.00 NMR | 2xTC | -0.0213 | -0.0119 | 0.0034 | 0.0161 | 0.00 NMR |
| 330 | 0.00 NMR | 2xTC | 0.0179 | 0.0066 | 0.0254 | 0.1572 | 0.00 NMR |

All Rounds



Max Novendstern

Jul 23, 2019 · 6 min read · Member-only · Listen

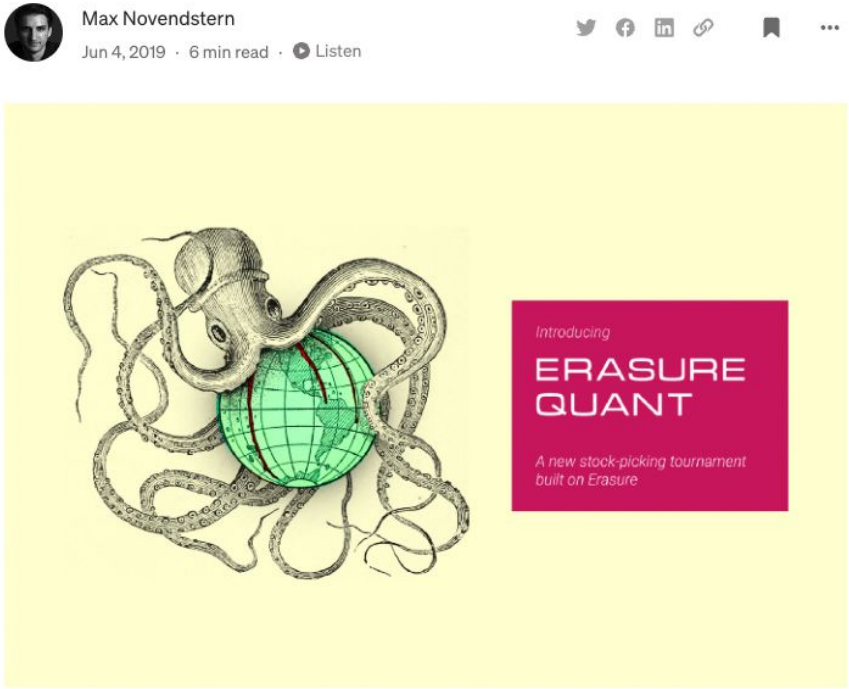



# Introducing Erasure Bay

## Erasure's new information marketplace

*Erasure Bay is an open market for information of any kind, built on the Erasure protocol. It's Numerai's first non-finance product. It's our bid to save the Web.*

https://medium.com/numerai/introducing-erasurebay-7a5de91b78d2



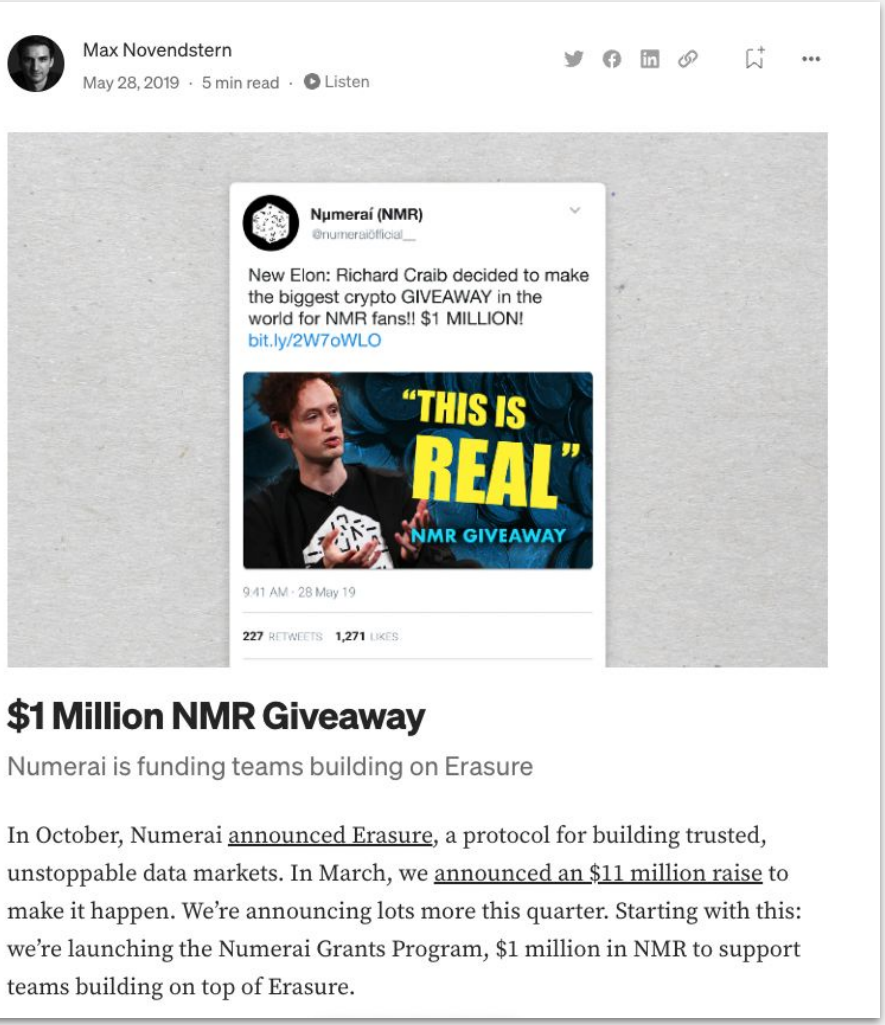

# Introducing Erasure Quant

## Erasure's first finance tournament

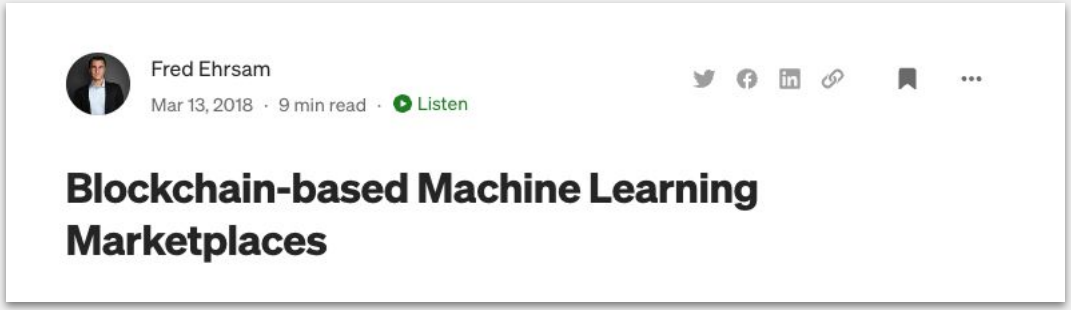
*Numerai built a stock-picking tournament on Erasure. We'll use it to crowdsource alpha for our hedge fund. So tool up to make money. Quant is only the first in an ecosystem of tournaments on Erasure. So fork it and build your own.*

Max Novendstern
Jun 4, 2019 · 6 min read · Listen

https://medium.com/numerai/introducing-erasure-quant-963e8e74c80c




https://medium.com/numerai/1-million-nmr-giveaway-6f2fcbc91d29




https://fehrsam.xyz/blog/blockchain-based-machine-learning-marketplaces

https://medium.com/@FEhrsam/blockchain-based-machine-learning-marketplaces-cb2d4dae2c17

Machine learning models trained on data from blockchain-based marketplaces have the potential to create the world's most powerful artificial intelligences. They combine two potent primitives: private machine learning, which allows for training to be done on sensitive private data without revealing it, and blockchain-based incentives, which allow these systems to attract the best data and models to make them smarter. The result is open marketplaces where anyone can sell their data *and* keep their data private, while developers can use incentives to attract the best data for their algorithms to them.

Constructing these systems is challenging and the requisite building blocks are still being created, but simple initial versions look like they are starting to become possible. I believe these marketplaces will transition us out of the current era of Web 2.0 data monopolies into a Web 3.0 era of open competition for data and algorithms, where both are directly monetized.

**Origin**

The base of this idea came in 2015 from talking with Richard of Numerai. Numerai is a hedge fund that sends encrypted market data to any data scientist who wants to compete to model the stock market. Numerai combines the best model submissions into a "metamodel", trades that metamodel, and pays data scientists whose models perform well.

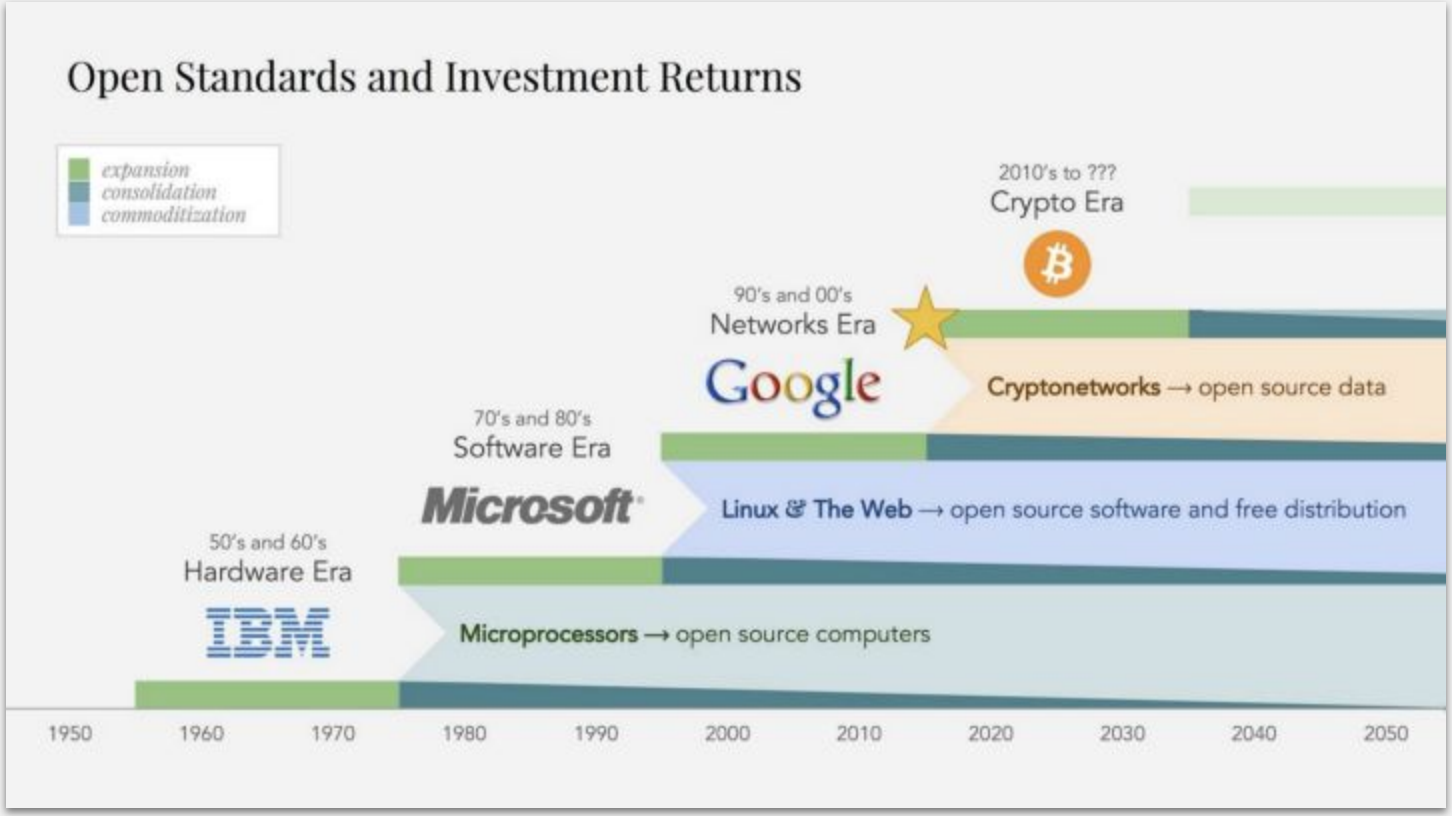
Having data scientists compete seemed like a powerful idea. So it got me thinking: can you create a fully decentralized version of this system that could be generalized to any problem? I believe the answer is yes.

**Implications**

First, decentralized machine learning marketplaces can dismantle the data monopolies of the current tech giants. They standardize and commoditize the main source of value creation on the internet for the last 20 years: proprietary data networks and the strong network effects surrounding them. As a result, **value creation gets moved up the stack from data to algorithms.**

Said another way, they **create a direct business model for AI**. Both feeding and training it.

# Open Standards and Investment Returns



# Where is Richard driving the ship?

- (2016-2017) Hedge fund, Meta-Model, centralized
- (2018-Present) Hedge fund, Meta-Model, decentralized
- (2020-2021) Different use cases for Erasure
- 2022 - Blockchain based machine learning marketplaces (?)

# Final Assessment

- October 2015 - Founded
- 2016 - Numerai with Bitcoin
- 2017 - Numeraire (NMR token)
- 2018 - Erasure
- 2019 - Erasure is Live
- 2020 - Numerai Signals
- 2021 - Numerbay
- 2022 -
- 2023 -