



**MANUEL JARABA**

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# WELCOME



## AGENDA

- Staking
- MEV opportunities
- Ethereum Staking technical implementation
- Delegation flows
- KILN web dashboard
- KILN APIs
- KILN Stats & Security

## ATTENDEES

### From KILN



**MANUEL  
JARABA**

Sales Engineer

### From LAPAM Investments *(fake company)*



**MARTIN  
JAMES**

Partner



**JOHN  
SMITH**

Technical Project  
Director

## SOME **TRADITIONAL** **FINANCE** WAYS OF MAKING MONEY

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BORROWING  
AND LENDING

FEE BASED  
INCOME

## SOME **DECENTRALIZED** **FINANCE** WAYS OF MAKING MONEY

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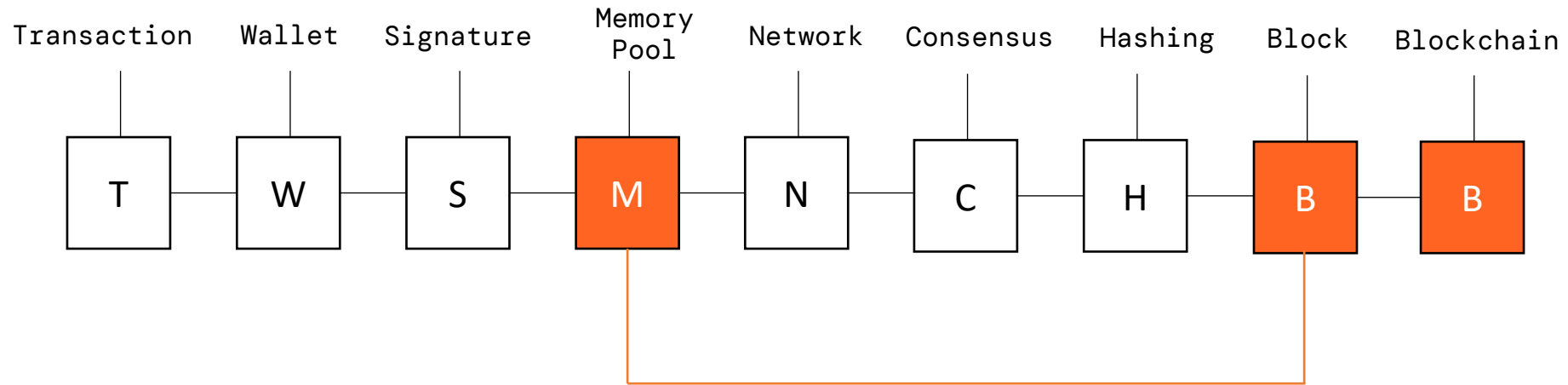
MINING FEES /  
BLOCK REWARDS

LIQUIDITY  
STAKING

MEV



# KILN.fi is an enterprise **staking solution**



Ethereum

4.3 %  
APY



Solana

5.5 %  
APY



Tezos

4 %  
APY



Near

10 %  
APY



Osmosis

58 %  
APY



Cosmos

16 %  
APY



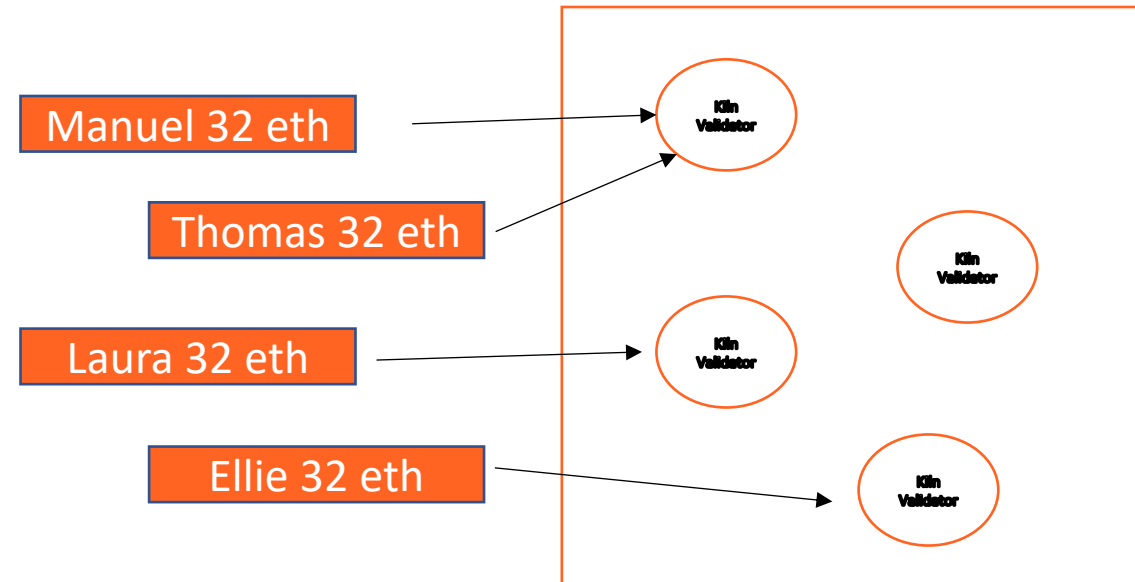
Avalanche

9 %  
APY

10 - 12%  
post merge

# KILN.fi works using delegation flows

## ETHEREUM STAKING - KILN VALIDATORS



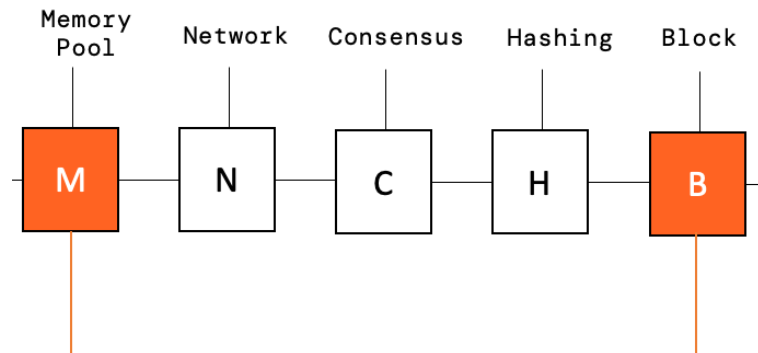
- 390+ validator keys using Teku
  - 12,480+ ETH
- 7000+ validator keys using Prysm
  - 224,000+ ETH

## WHAT IS MEV? (*maximal extraction volume*)

Another way for miners / validators to **make money** outside of transactions fees and mining block rewards.

## HOW DO YOU MAKE MONEY WITH MEV?

**Re-ordering / optimizing** transactions in a block.



# MEV opportunity examples



## LIQUIDATION

Liquidators repay up to 50% of the assets borrowed and in return they are eligible to a portion of the collateral at the market price minus a liquidation discount of 5% or more.

Transaction Hash:

0x963054a6001e4711a64b5dc35a37a0eb3aaf3bb7c204f021dd5e85e7a8a51a31

Status:

Success

Block:

11132918 3131128 Block Confirmations

Timestamp:

485 days 3 hrs ago (Oct-26-2020 03:47:46 PM +UTC)

Transaction Action:

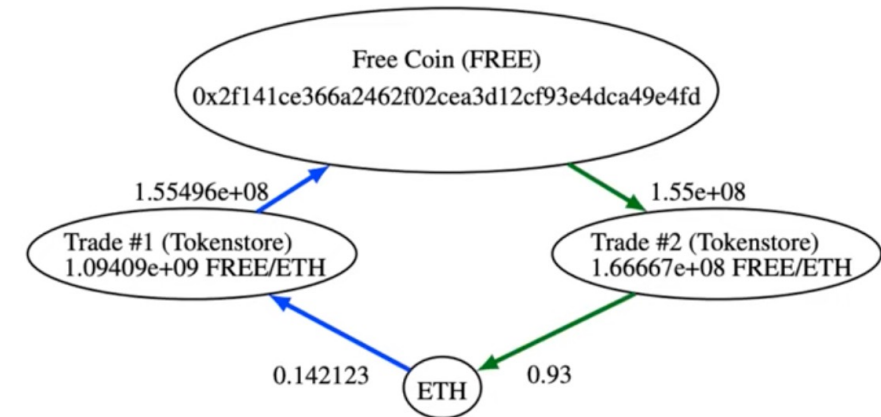
Borrow 11,558.317402311470764075 DAI From Compound

Liquidator Repay 11,558.317402311470764075 DAI To Aave Protocol V1

Liquidation 1,100.830609991235507621 LINK On Aave Protocol V1

## ARBITRAGE

If two decentralised exchanges are offering a token at two different prices, someone can buy the token on the lower priced decentralised exchange and sell it in the higher decentralised exchange in a single transaction.



KILN.fi uses **MEV boost**

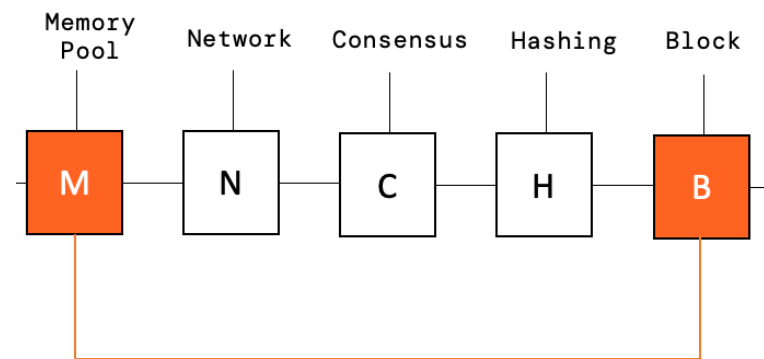


Ethereum

*4.3% APY*



*10 - 12% APY*



ROLE 1: **propose** the block

ROLE 2: **mine** the block





**\$672,461,921**

Total Extracted MEV

**\$8,606,882**

Last 30 days Extracted MEV

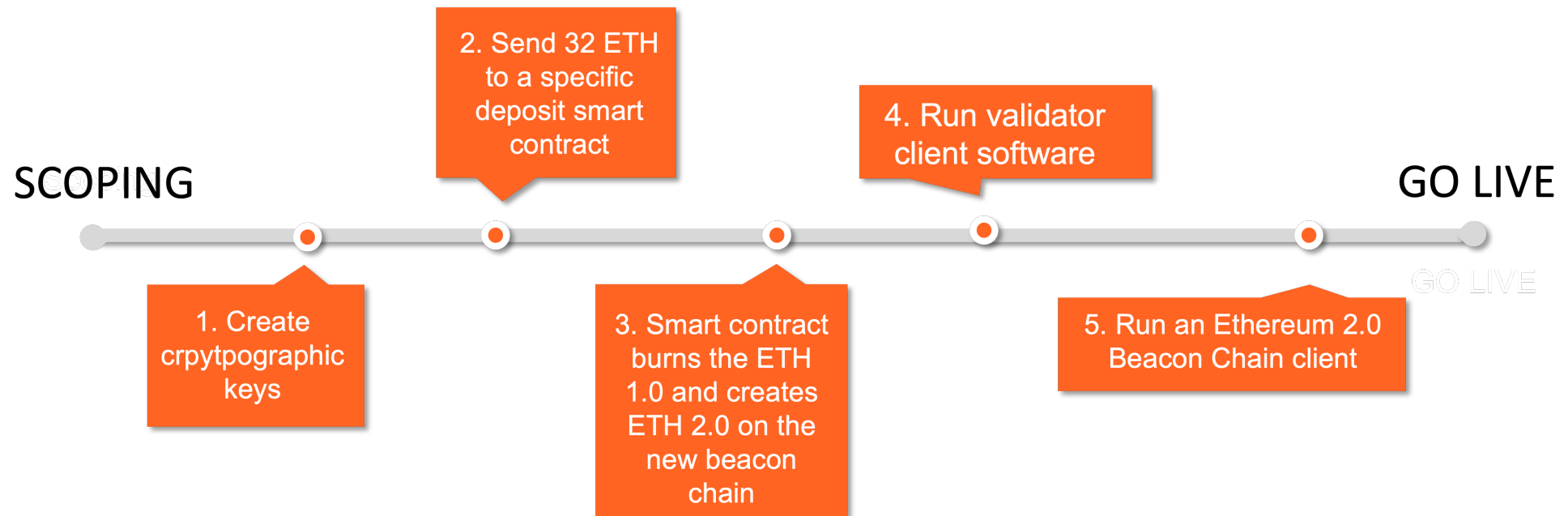
**\$130k**

Last 24h Extracted MEV

## **THE** IMPLEMENTATION

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## How do you implement eth 2.0 staking from a technical perspective?



# You can use KILN.fi solutions



## Open-source web dashboard

Protocol stats

1-click staking  
widget

Rewards  
dashboard

Organisation  
dashboard

## Staking contracts

ETH Deposit  
Contract

ETH  
Withdrawal  
contract

## APIs

Rewards API

IAM API

## Infrastructure & services

KMS

IAM

Monitoring & data  
services

Validator nodes



Multi-cloud Kubernetes infrastructure

- Easy enterprise **staking**
- **Non-custodial**: integrated with all major wallets/custodians
- Comprehensive rewards and **monitoring APIs**

# Delegation flows



dPOS protocol



**Ethereum**

Generating validation key



Funding the validator with 32  
eth



Monitoring validator performance and  
accrued rewards



**Solana**



**Tezos**

Issuing a single staking  
transaction with:

- Amount to stake
- Validator address

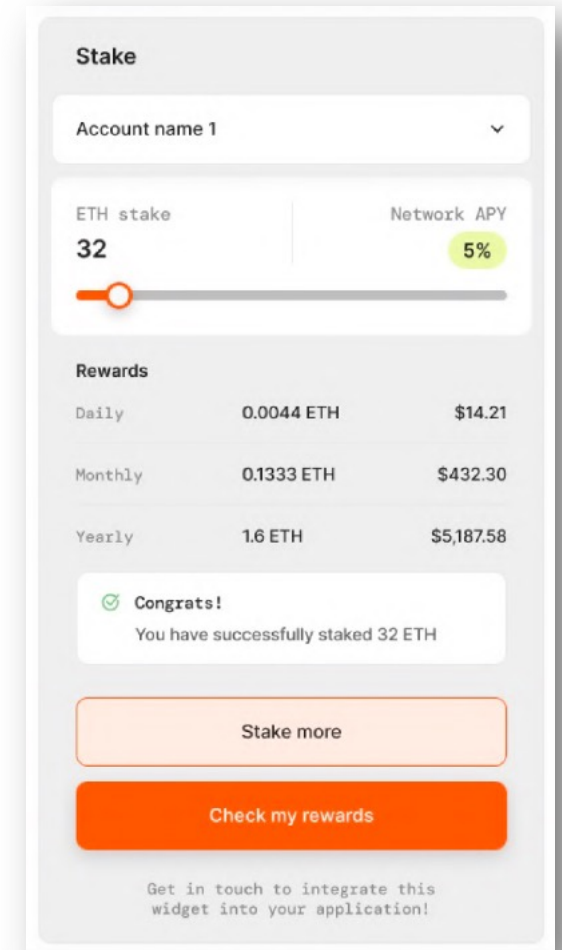
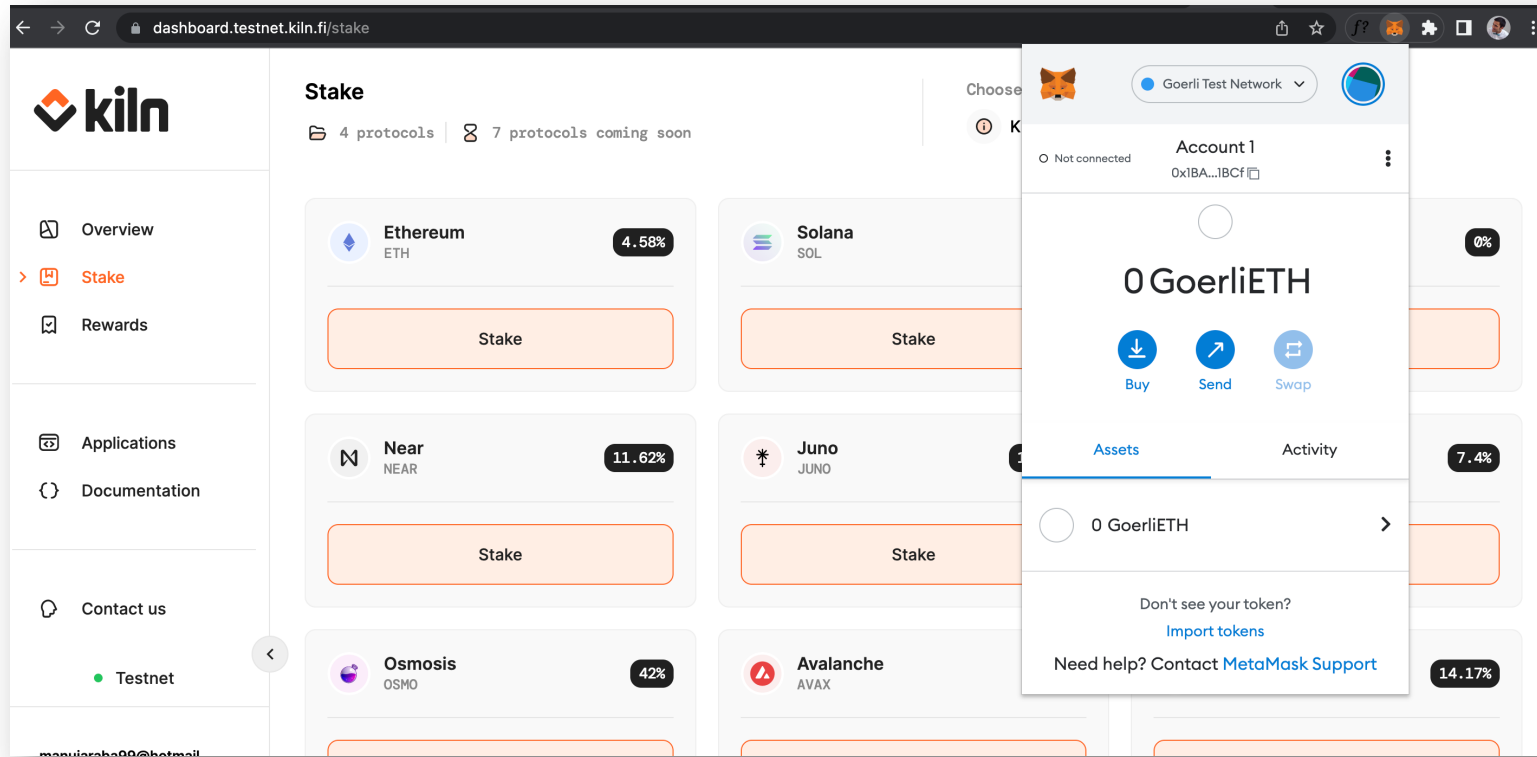


Monitoring validator performance and  
accrued rewards

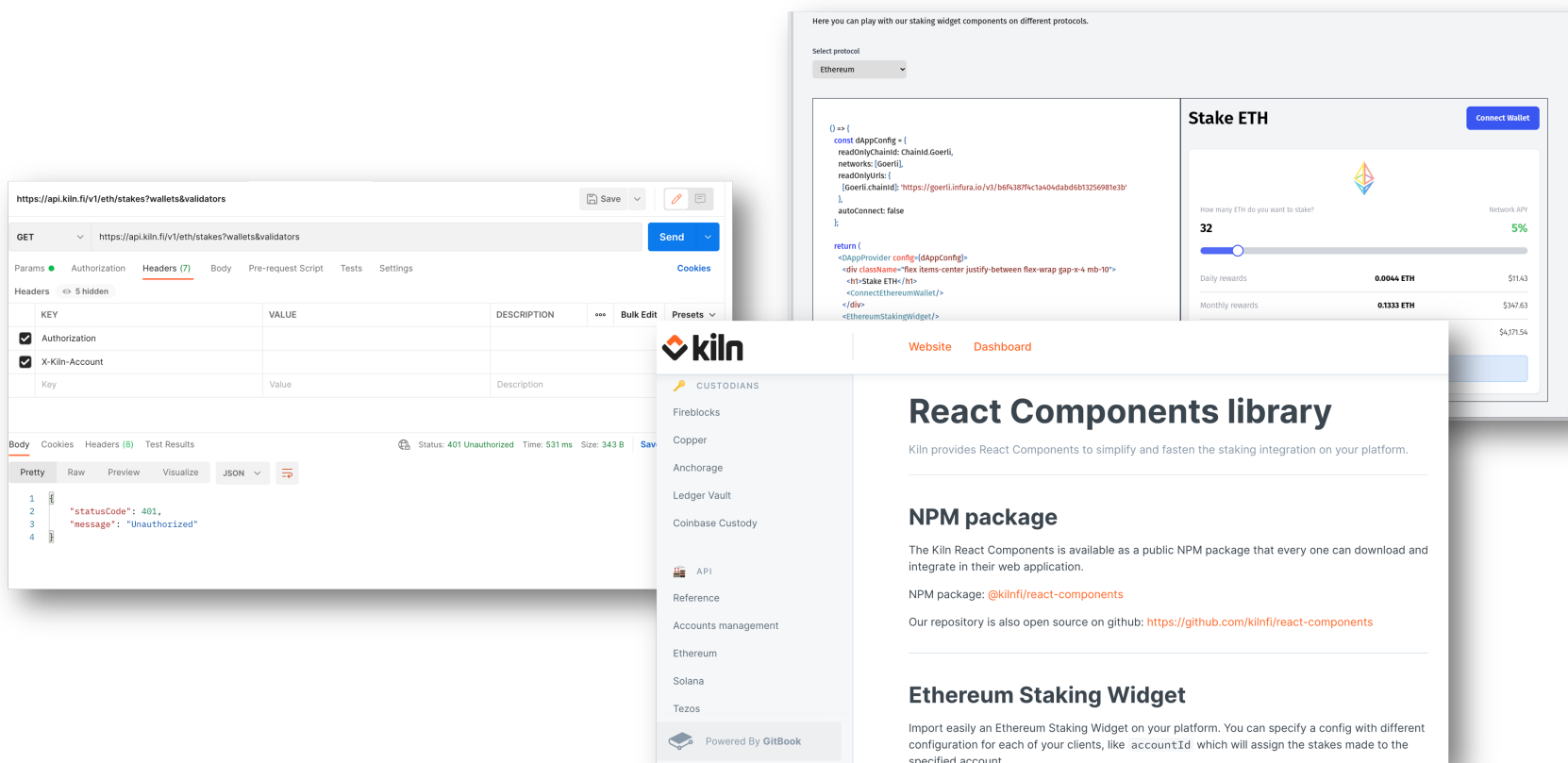
Check custodians API



# Open source web dashboard / staking button



# KILN.fi API documentation / testing

The image is a composite of three overlapping screenshots. The background screenshot shows a REST client interface for the URL 'https://api.kiln.fi/v1/eth/stakes?wallets&validators'. It displays a 'GET' request with headers for 'Authorization' and 'X-Kiln-Account'. The response body shows a JSON error: {'statusCode': 401, 'message': 'Unauthorized'}. The middle screenshot is a code editor showing a React component configuration for 'Stake ETH' with various props like 'chainId', 'networks', and 'autoConnect'. The foreground screenshot is a documentation page for 'React Components library' and 'Ethereum Staking Widget', providing information on NPM packages and GitHub repositories.

https://api.kiln.fi/v1/eth/stakes?wallets&validators

GET https://api.kiln.fi/v1/eth/stakes?wallets&validators

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Headers 5 hidden

KEY	VALUE	DESCRIPTION
Authorization		
X-Kiln-Account		
Key	Value	Description

Body Cookies Headers (8) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "statusCode": 401,
3   "message": "Unauthorized"
4 }
```

Status: 401 Unauthorized Time: 531 ms Size: 343 B

kiln Website Dashboard

## React Components library

Kiln provides React Components to simplify and fasten the staking integration on your platform.

## NPM package

The Kiln React Components is available as a public NPM package that every one can download and integrate in their web application.

NPM package: [@kilnfi/react-components](#)

Our repository is also open source on github: <https://github.com/kilnfi/react-components>

## Ethereum Staking Widget

Import easily an Ethereum Staking Widget on your platform. You can specify a config with different configuration for each of your clients, like `accountId` which will assign the stakes made to the specified account.

Powered By GitBook

Stake ETH

How many ETH do you want to stake? 32

Network APY 5%

Daily rewards 0.0044 ETH \$11.43

Monthly rewards 0.1333 ETH \$347.63

LET'S SEE A QUICK DEMO



# Kiln Security & Stats

## Historical **mainnet** performance

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Average all-time uptime per key:  
99.85%

90d uptime: 99.94%

Slashing incidents: 0

## **Security** practices

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Kiln is **SOC 2 certified** as audited by Prescient Assurance

Kiln is **non custodian**, When staking with us you keep ownership of your token.

Kiln makes use of **managed services and security solutions** available on various cloud providers.

Kiln **encrypts data at rest** and in transit for all of our resources.



Q & A

Manuel Jaraba

