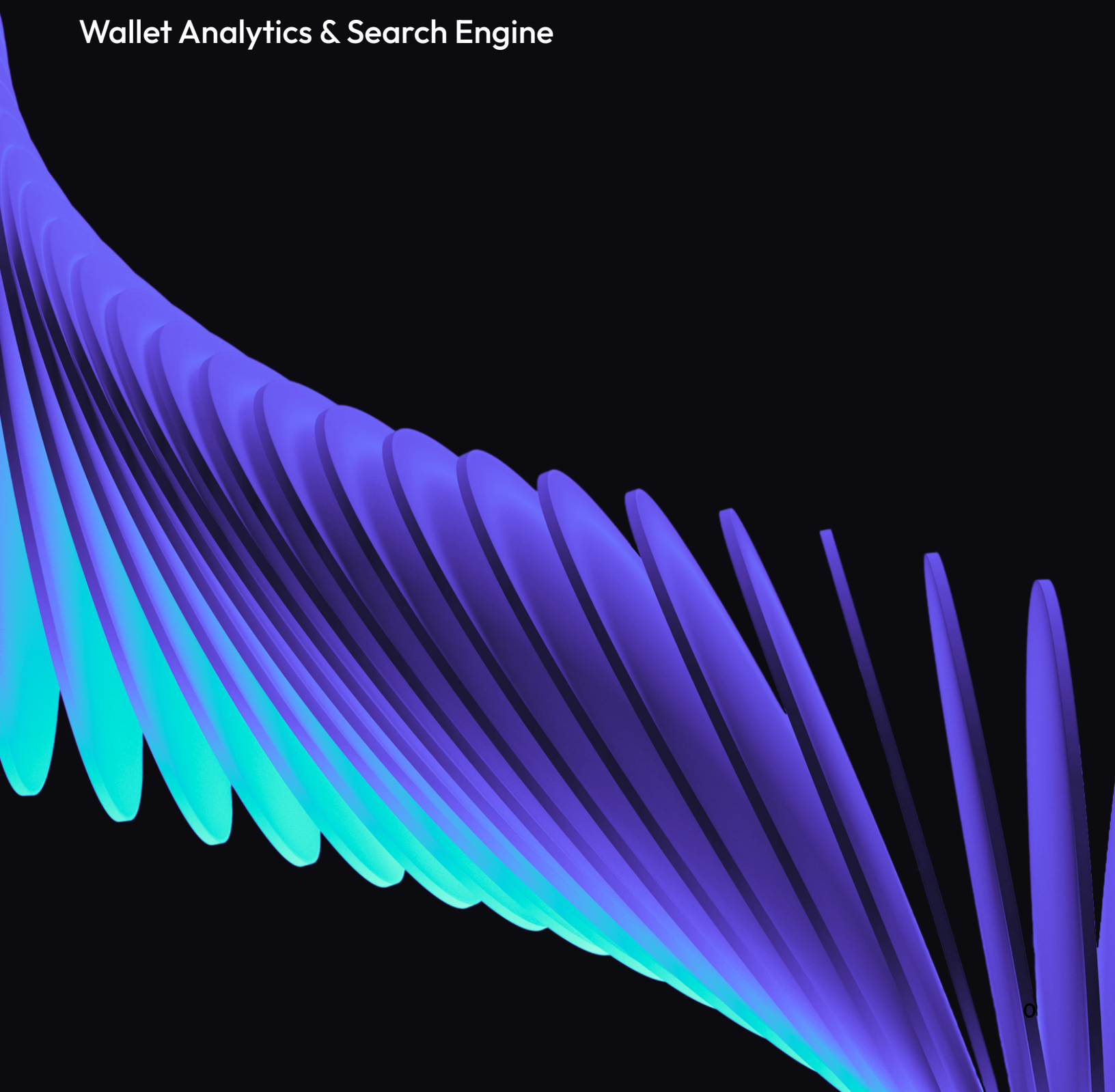
SPOCK

# LITEPAPER

Wallet Analytics & Search Engine



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# Problem

## Web2 analytics platforms are not built for Web3

1. **Knowledge:** Web3 projects want to know more about their users.
2. **Understandability:** DApp creators need a tool to understand Web3 specific data points.Knowledge
3. **Limited Service:** Google Analytics is limited to only providing Web2 specific metrics.
4. **Reliability:** DApp creators have no platform to reliably reach their ideal users.

The concept of product-market fit does not exist in Web3 right now. The recent boom in user activity has largely been fueled by unsustainably high yields and skyrocketing token prices. After the cooling down of this frenzy, Web3 companies need to focus on creating real value for their users, and that means they need to understand the on-chain user behavior. All the analytics platforms largely focus on analyzing projects from the point of view of an investor. None of them focuses on the on-chain behavior of wallet addresses, and dApps need a platform that does this for them.

**Web3 projects spent $166.6 million in 2020 and there is no reliable way to know how well that money was spent. That spending is expected to reach $4.37 billion by 2026**. (Source)

## No way to know what kind of users they need to target

Web3 projects have no idea about their ideal wallet demographics.

If a team is building a product for liquidity providers, they have no way to know which addresses are long-time active LPs on Uniswap.

If a product is financially risky, the team needs to attract users who have a history of trying exotic products, but that data is not easily available.

# Solution

**"Tools to analyze the behavior of users already exist in the Web2 world, so why not apply the same techniques for behavioral analysis for DeFi, NFTs, and Metaverse?"**

## Spock Search: Wallet Search Engine

The vision of Spock is to facilitate Web3 companies to make sense of on-chain data. Spock is a wallet analytics and search engine platform to provide DAOs and protocols with the metrics they need to understand, target, and grow their user base.

In September 2022, we launched Spock Analytics which allows you to get critical insights into your dApp related to the wallets that connect to your dApp and their journey from connection to submitting the transaction. In December, we will be launching the first version of Spock Search. Spock Search is the world's first wallet search engine.

# Use Cases

**Spock is building the most sophisticated on-chain wallet search engine.**

## Some use cases of Spock

1. Run Twitter campaigns targeting usernames associated with relevant on-chain activity.
2. Optimize your token airdrop to the addresses who have a good reputation of contributing to DAOs.
   *Look for labels such as: Elite DAO contributor, OP airdrop holder Uniswap airdrop holder.*
3. Optimize your NFTs launch and target addresses that buy, hold, and trade NFTs.
   *Look for labels such as: Blue chip NFTs holder, Rare NFTs collector.*
4. Filter out adresses who have received value from Tornado Cash
   *Look for labels such as: Privacy Protocols User, Tornado Withdrawer*
5. Know the temperament of wallet addresses
   *Look for labels such as: Explorer, Builder, Conservative investor.*
6. You are launching a new DEX and want LPs from other DEXs to provide liquidity.
   *Look for labels such as: DEX User, Liquidity Provider.*

# Technology

**Spock provides the core technology to kickstart the data revolution in the Web3 industry.**

Here is quick guide on the wallet labels and what they mean:

# General Information

## Wallet Information

| | |
|---|---|
| ENS Names | Current and past ENS names associated with the address (if they exist) |
| Twitter | Twitter account associated with an address (if it exists) |
| Deployed | Contracts deployed by the address |
| Transferred | Addresses with which the address in question has exchanged value |
| Same Owner | Other addresses owned by the owner of the address in question |
| Associated | Other addresses associated with the address |
| Investments | List of investments made by address in token sales, ICOs, IDOs, etc. |

## Asset Holdings

| | |
|---|---|
| Tokens | Tokens held by an address |
| NFTs | NFTs held by an address |
| % In Stables | % of holdings in stables |
| Historical Holdings | Historical holdings of tokens, NFTs, and stables |

## Address Type

| | |
|---|---|
| User | Address owned by a single person |
| Multisig | Multisig contract operated by more than one wallet |
| Bot | Address owned by a bot |
| Contract | Smart contract address |

### Address Activity

| | |
|---|---|
| All-time | All-time address on-chain activity chart |
| Yearly | Yearly address on-chain activity chart |
| Monthly | Monthly address on-chain activity chart |
| Weekly | Weekly address on-chain activity chart |
| Daily | Daily address on-chain activity chart |

### Address Activity On DApps

| | |
|---|---|
| Value deposited | Value deposited by an address |
| Value withdrawn | Value deposited by an address |
| Total Volume | Total volume between an address and a dApp |
| DApp Label | Primitive type of the dApp |
| Transactions | Table of all the transactions |
| {DApp} Transactions | Table of all the transactions on a specific dApp<br><br>Example: Transactions on Uniswap |

## Wallet Labels

### Address Behavior

| | |
|---|---|
| Explorer | Address has the tendency of exploring new protocols or has invested in newly launched assets |
| Builder | Address associated with development activity or has deployed many contracts |
| Conservative | Address has shown the behavior of using only blue chip protocols or has invested in only blue chip protocols |
| Deployer | Address has deployed at least one contract |
| Exotic Protocols User | Address has shown the behavior of using exotic protocols and buying and holding exotic assets |
| Cold Feet | Address gets cold feet quickly when a protocol does not work as intended |
| Warm Feet | Address gives enough time to new protocols when they decide to use one |

## Address Profile

| | |
|---|---|
| DEX User | Address associated with DEX activity |
| Lender | Address associated with lending activity |
| Borrower | Address associated with borrowing activity |
| Undercollateralized Lender | Address associated with undercollateralized lending activity |
| Undercollateralized Borrower | Address associated with undercollateralized borrowing activity |
| CDP Creator | Address associated with CDPs |
| Liquid Staker | Address associated with liquidity staking activity |
| Yield Farmer | Address associated with yield farming activity |
| Services User | Address associated with using on-chain services like PoolTogether |
| Yield Aggregators User | Address associated with yield aggregation activity |
| Derivatives User | Address associated with derivatives activity |
| Algo-Stables User | Address associated with holding or trading algorithmic stablecoins |
| Cross-chain Hopper | Address associated with using bridges to hop between chains |
| Synthetic User | Address associated with holding or trading synthetic assets |
| Insured | Address that has bought on-chain insurance |
| Previously Insured | Address that has bought on-chain insurance in the past |
| Launchpad Investor | Address associated with launchpad investing or other activity |
| Reserve Currency Holder | Address associated with holding, trading, or other activities in the reserve currency ecosystem |
| Options User | Address associated with buying, holding, and selling options |
| Indexes User | Address associated with buying, holding, and selling indexes |
| Payments Protocol User | Address associated with sending and receiving payments using payments protocols |
| Privacy Protocols User | Address associated with using privacy centric protocols |

| | |
|---|---|
| NFTs Trader | Address associated with buying, holding, and selling NFTs |
| NFT Lender | Address associated with lending NFTs |
| NFT Borrower | Address associated with borrowing NFTs |
| Real World Assets (RWA) User | Address associated with buying, holding, and selling real world assets |
| Staker | Address associated with staking activity |
| Farmer | Address associated with farming activity |
| Prediction Markets User | Address associated with prediction markets activity |
| Gamer | Address associated with gaming activity |
| Oracle User | Address associated with oracle activity |
| CLM User | Address associated with CLM activity |

## Address Activity

| | |
|---|---|
| Active on {Chain} | Address activity on a specific chain<br><br>Examples: Ethereum, Polygon |
| Dormant | Address which has not seen any transaction for over a year |
| Empty | Address which has never done any transaction |
| High Gas Consumer | Address associated with high on-chain gas consumption |
| High Activity | Address in the top 10% of highly active addresses on any chain |
| 0 Gas Price Sender | Address which frequently sends transactions with 0 gas price |
| Medium Activity on {Chain} | Address in the top 50% of highly active addresses on a specific chain<br><br>Examples: Ethereum, Polygon |
| Heavy Activity on {Chain} | Address in the top 25% of highly active addresses on a specific chain<br><br>Examples: Ethereum, Polygon |

| | |
|---|---|
| Medium Activity on {Chain} | Address in the top 10% of highly active addresses on a specific chain<br><br>Examples: Ethereum, Polygon |
| Legendary Activity on {Chain} | Address in the top 1% of all activity on a specific chain<br><br>Examples: Ethereum, Polygon |
| Mining Pool Recipient | Address that receives value from mining pools |

## Net Worth

| | |
|---|---|
| Millionaire | Has a total net worth of => $1,000,000 on all EVM chains |
| Billionaire | Has a total net worth of => $1,000,000,000 on all EVM chains |
| {Token} Millionaire | Has a total net worth of => $1,000,000 on all EVM chains in a specific coin or token<br><br>Examples: ETH Millionaire, Uniswap Millionaire |
| {Token} Billionaire | Has a total net worth of => $1,000,000,000 on all EVM chains in a specific coin or token<br><br>Examples: ETH Billionaire, Uniswap Billionaire |
| Whale | Has a total net worth of => $10,000,000 on all EVM chains |
| Shark | Has a total net worth of =< $10,000,000 on all EVM chains |
| Fish | Has a total net worth of =< $100,000 on all EVM chains |

## Contract Type

| | |
|---|---|
| CEX | Address owned and operated by a centralized exchange |
| Social recovery contract | Contract used for the purpose of social recovery wallet |
| Treasury | Treasury contract owned and operated by a DAO |
| Centralized contract | Contract which has given admin access to a single address |
| Upgradeable contract | Contract which can be upgraded by the admin |
| Protocol | Protocol contract |

| | |
|---|---|
| | Examples: Uniswap, Compound |
| Primitive Type | Primitive type of the protocol<br><br>Examples: DEX, Lending, Staking |
| {Type} Token | Token contract<br><br>Examples: ERC-20 Token, ERC-721 Token |
| Factory | Contract used by an EOA to create other contracts |
| Self-Destruct | Contract that contains a self-destruct function |
| Proxy | Contract that creates other contracts |
| Token Channel | Contract used to disperse tokens to addresses |
| Forwarder | Contract that forwards funds to another address |
| Mixer | Contract that mixes tokens to create anonymity |

## Attacker/Scam/Suspicious Addresses

| | |
|---|---|
| Attacker | Address linked to attacks<br><br>Example: Sandwich attack |
| Sandwich Attacker | Address linked to sandwich attacks |
| MEV Attacker | Address linked to general MEV attacks |
| Scam | Address linked to a scam |
| Hacker | Address linked to a known hack |

*More labels will be added to this category later.*

## Attack Victim

| | |
|---|---|
| MEV Attack Victim | Address that has been a victim of a general MEV attack |
| Sandwich attack Victim | Address that has been a victim of a sandwich attack |
| Vulnerable | Contract address that has a known vulnerability |

| | |
|---|---|
| {Name} Vulnerability | Name of the known vulnerability in a contract |

*More labels will be added to this category later.*

## Token Investor Profile

| | |
|---|---|
| Token Sale Investor | Address associated with investments in token sales |
| ICO Investor | Address associated with investments in ICOs |
| IDO Investor | Address associated with investments IDOs |
| {Token} Sale Investor | Address associated with investments in a specific token sale<br><br>Example: Ethereum Sale Investor |
| {Token} ICO Investor | Address associated with investments in a specific ICO<br><br>Example: Ethereum ICO Investor |
| {Token} IDO Investor | Address associated with investments in a specific IDO<br><br>Example: Polygon IDO Investor |
| Investor Distribution Recipient | Address which has received vested tokens from their token sale investments |
| Diamond Hands | Address associated with holding tokens in bear markets |
| Conservative Investor | Address only interested in investments in blue chip assets and stable coins |
| Diversified Token Holder | Address which has diversified assets portfolio |
| Exchange Listing Flipper | Address associated with profiting from exchange listing of tokens |

## NFTs Investor Profile

| | |
|---|---|
| NFT Collector | Address associated with collecting NFTs |
| Uncommon NFT Collector | Address that holds the top 10% of NFTs |
| Rare NFT Collector | Address that holds the top 2.5% of NFTs |
| Epic NFT Collector | Address that holds the top 1% of NFTs |

| | |
|---|---|
| Legendary NFT Collector | Address that holds the top 0.1% of NFTs |
| NFT Blue Chip Holder | Address associated with buying, holding, and selling of bluechip NFTs |
| OpenSea Account | Address that has an account on OpenSea |
| NFT Marketplace Account | Address that has an account on a marketplace other than OpenSea |

## Governance

| | |
|---|---|
| DAO | Address associated with a DAO |
| Airdrop Receiver | Address which has received at least one airdrop |
| Airdrop Hodler | Address associated with holding the airdrops received |
| Airdrop Seller | Address associated with selling the airdrops received |
| {Token} Airdrop Receiver | Address associated with receiving a specific airdrop<br><br>Examples: OP Airdrop Receiver, Uniswap Airdrop Receiver |
| {Token} Airdrop Hodler | Address associated with holding a specific airdrop received<br><br>Examples: OP Airdrop Hodler, Uniswap Airdrop Hodler |
| {Token} Airdrop Seller | Address associated with selling a specific airdrop received<br><br>Examples: OP Airdrop Seller, Uniswap Airdrop Seller |
| Multisig Creator | Address which has created at least one multisig account |
| Multisig Owner | Address which is an owner of at least one multisig account |
| Medium Multisig Activity | Address in the top 50% of all multisig activity |
| Heavy Multisig Activity | Address in the top 25% of all multisig activity |
| Elite Multisig Activity | Address in the top 10% of all multisig activity |
| Legendary Multisig Activity | Address in the top 1% of all multisig activity |

| | |
|---|---|
| Medium DAO Contributor | Address in the top 50% of all DAO activity |
| Heavy DAO Contributor | Address in the top 25% of all DAO activity |
| Elite DAO Contributor | Address in the top 10% of all DAO activity |
| Legendary DAO Contributor | Address in the top 1% of all DAO activity |

## Primitive Type

| | |
|---|---|
| DEX | Address associated with a DEX protocol |
| Lending & Borrowing | Address associated with a lending & borrowing protocol |
| Undercollateralized Lending & Borrowing | Address associated with a undercollateralized lending & borrowing protocol |
| CDP | Address associated with a CDP protocol |
| Liquid Staking | Address associated with a liquid staking protocol |
| Yield | Address associated with a yield generating protocol |
| Services | Address associated with an on-chain service protocol |
| Yield Aggregator | Address associated with a yield aggregator protocol |
| Derivative | Address associated with a derivatives protocol |
| Algo-Stable | Address associated with an algorithmic stablecoin protocol |
| Cross-chain | Address associated with a cross-chain bridge |
| Synthetic | Address associated with a synthetics protocol |
| Insurance | Address associated with an insurance protocol |
| Launchpad | Address associated with a project launchpad |
| Reserve Currency | Address associated with a reserve currency protocol |
| Options | Address associated with an options protocol |
| Indexes | Address associated with an asset index |
| Payments | Address associated with a payments protocol |

| | |
|---|---|
| Privacy | Address associated with a privacy protocol |
| NFT Lending & Borrowing | Address associated with an NFT lending & borrowing protocol |
| Real World Assets (RWA) | Address associated with RWA protocol |
| Staking | Address associated with a staking protocol |
| Farming | Address associated with a farming protocol |
| NFT Marketplace | Address associated with an NFT marketplace |
| Prediction Market | Address associated with a prediction market protocol |
| Gaming | Address associated with a gaming protocol |
| Oracle | Address associated with an oracle |
| CLM | Address associated with a CLM protocol |
| {Protocol} Fork | Protocol address which is a fork of some other protocol<br><br>Example: Uniswap Fork |

## DEX & CLM

| | |
|---|---|
| DEX Trader | Address associated with DEX trading |
| {DEX} Trader | Address associated with a specific DEX trading<br>Example: Uniswap Trader |
| Medium DEX Trader | Address in the top 50% of all DEX trading activity |
| Heavy DEX Trader | Address in the top 25% of all DEX trading activity |
| Elite DEX Trader | Address in the top 10% of all DEX trading activity |
| Liquidity Provider | Address in the top 1% of all DEX trading activity |
| {DEX} Liquidity Provider | Address associated with liquidity provision on a specific DEX<br><br>Example: Uniswap Liquidity Provider |
| Medium Liquidity Provider | Address in the top 50% of all liquidity providing activity |
| Heavy Liquidty Provider | Address in the top 25% of all liquidity providing activity |

| | |
|---|---|
| Elite Liquidity Provider | Address in the top 10% of all liquidity providing activity |
| Legendary Liquidity Provider | Address in the top 1% of all liquidity providing activity |
| CLM User | Address associated with activity on CLM protocols |
| {CLM} User | Address associated with liquidity provision on a specific CLM<br>Example: Unipilot User |
| Medium CLM User | Address in the top 50% of all CLM activity |
| Heavy CLM User | Address in the top 25% of all CLM activity |
| Elite CLM User | Address in the top 10% of all CLM activity |
| Legendary CLM User | Address in the top 1% of all CLM activity |
| Pool Creator | Address associated with pool creation activity |
| Medium Pool Creator | Address which has created the top 50% of all pools |
| Heavy Pool Creator | Address which has created the top 25% of all pools |
| Elite Pool Creator | Address which has created the top 10% of all pools |
| Legendary Pool Creator | Address which has created the top 1% of all pools |
| {Token} Pool Creator on {DEX} | Address which has created a specific token pool on a specfic DEX<br><br>Examples: Ethereum Pool Creator on Uniswap, USDC Pool Creator on SushiSwap |
| Liquidity Pool | Contract address associated with a liquidity pool |
| {Token/Token} Liquidity Pool on {DEX} | Contract address associated with a specific liquidity pool on a specific DEX<br><br>Examples: ETH/USDC Liquidity Pool on Uniswap, ETH/DAO Liquidity Pool on SushiSwap |
| MetaMask Swap User | Address associated with MetaMask swap activity |

### Privacy

| | |
|---|---|
| Privacy Protocols User | Address associated with using privacy protocols |
| {Protocol} Privacy Protocol User | Address associated with using a specifc privacy protocol<br><br>Example: Tornado Cash Privacy Protocol User |
| Tornado Withdrawer | Address which has received value from Tornado Cash |

*More labels will be added to this category later.*

*More primitive-specific labels will be added later.*

Labels mentioned above have been conceived using feedback from our potential users. Many labels have been intentionally left out, and those mentioned here could change when Spock Search launches.

## About

**Spock's vision is to empower DAOs and Web3 companies to make smarter growth decisions.**

The transparency that comes with the blockchain technology is unprecedented in the history of humanity, and Spock aims to create tools to enable anyone to make sense of on-chain data.

Spock is a product of Xord

# Find Out More

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