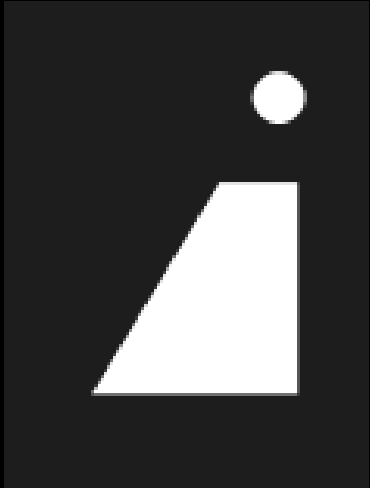




ANTI-SYBIL AS A SERVICE FOR DECENTRALISED
APPLICATIONS

INTEREP'S AIMS:



- INTEGRATE WITH SOURCES OF DIGITAL IDENTITY
- BRIDGE TO ETHEREUM
- ADD PRIVACY GUARANTEES VIA SEMAPHORE

THE APPLICATION STACK



ZK

Group
Management

Application

Semaphore

Interep

EVM Blockchain

ID
SOURCES

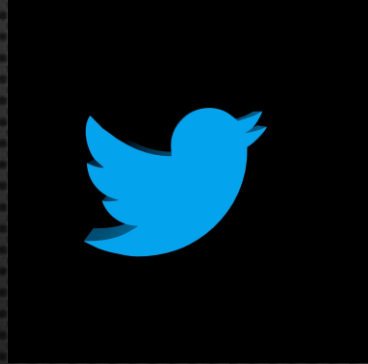
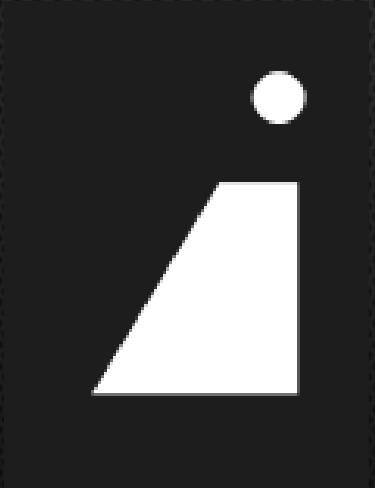


IDENTITY SOURCES

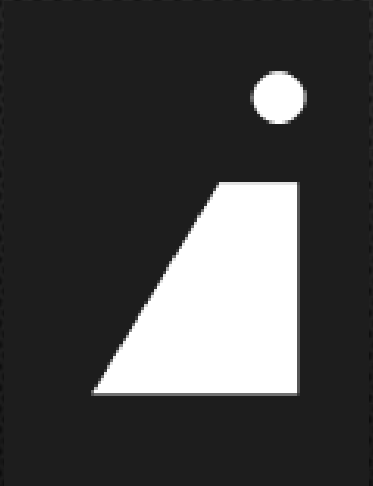


- REAL-WORLD IDENTITY IS MIRRORED IN DIGITAL ID
- BUT WE NEED TO FILTER OUT THE BOTS

ID SOURCES: SOCIAL NETWORKS



MORE ID SOURCES



- EMAIL
- GOVERNMENT AUTHORITIES
- CURATED GROUPS
- OTHER ID PROJECTS
- ON-CHAIN SOURCES

SEMAPHORE



- SEMAPHORE GROUPS = MEMBERSHIP SETS
- MEMBERS MAY SIGNAL ON A TOPIC
- E.G.: SIGNAL = VOTE, TOPIC = PROPOSAL
- ZERO-KNOWLEDGE

GROUPS



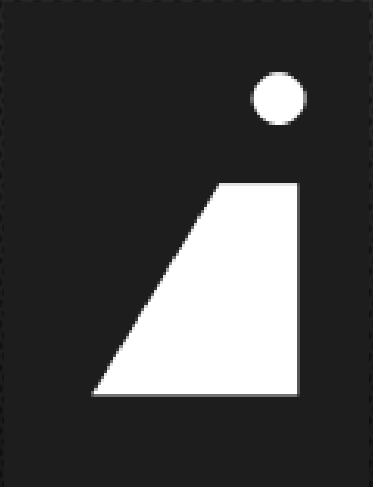
- USERS PROVE MEMBERSHIP WITH ID SOURCE
- MULTIPLE TIERS
- GROUPS REPRESENT DIFFERENT LEVELS OF GUARANTEE
- STRONG GUARANTEES/SMALLER POOL VS WEAKER GUARANTEES/LARGE POOL

JOINING GROUPS



- USERS PROVE MEMBERSHIP WITH THE ID SOURCE
- GROUP TIER WILL BE ASSESSED
- JOIN BY SIGNING WITH ETH ADDRESS
- THE LINK REMAINS PRIVATE

ON-CHAIN GROUPS



- GROUP MEMBERSHIP IS MAINTAINED ON-CHAIN
- E.G.: A WHITE-LIST OF APPROVED ACCOUNTS
- FOR CURATED GROUPS, OR FOR ON-CHAIN ID SOURCES

APPLICATIONS



- PRIVATE VOTING
- SOCIAL NETWORKS
- ANTI-SPAM, E.G. RLN
- FAIR AIRDROPS
- SYBIL-RESISTANT FAUCETS

DEMO



LINKS



- APP: [HTTPS://INTEREP.LINK](https://INTEREP.LINK)
- DOCS: [HTTPS://INTEREP.LINK/DOCS](https://INTEREP.LINK/DOCS)
- CODE: [HTTPS://GITHUB.COM/INTEREP-PROJECT](https://GITHUB.COM/INTEREP-PROJECT)
- DISCORD: [HTTPS://DISCORD.GG/JCQxBCZP](https://DISCORD.GG/JCQxBCZP)