interep

An identity bridge from web2 to web3

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interep

A pragmatic approach to
on-chain identity

Interep's Aims

- Bridge existing reputation to Ethereum
- Integrate with providers of digital identity
- Add privacy guarantees using Semaphore

Real-world identity is mirrored in digital ID...

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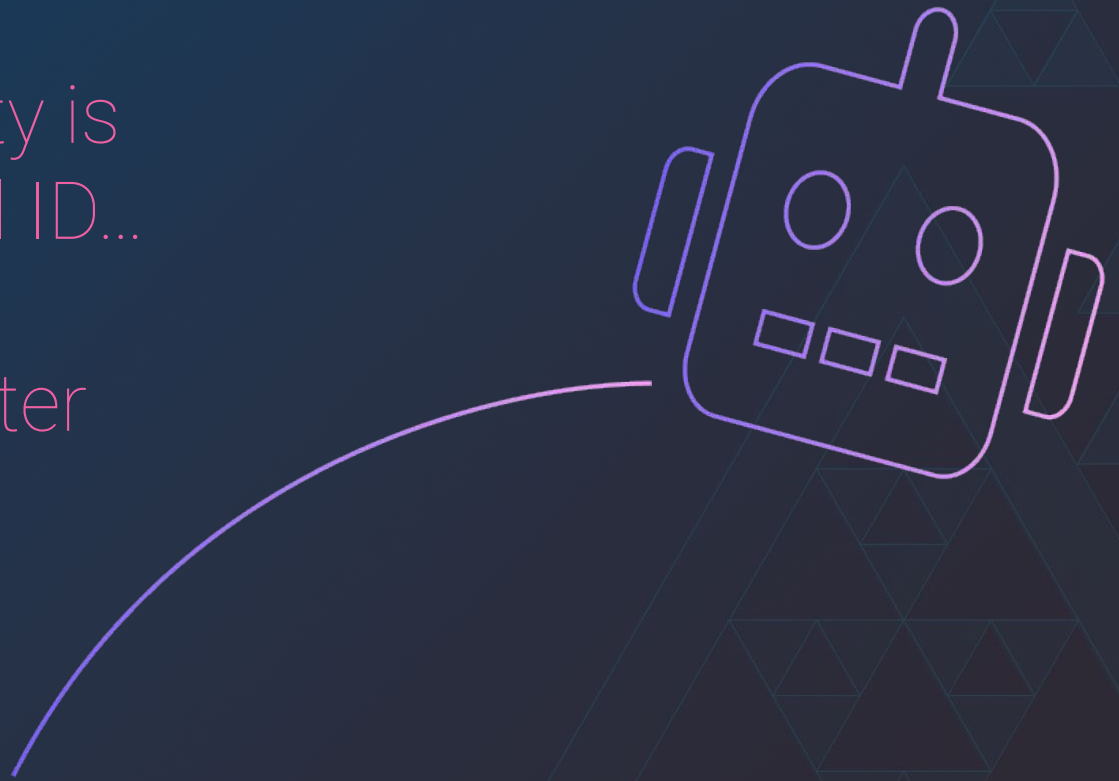
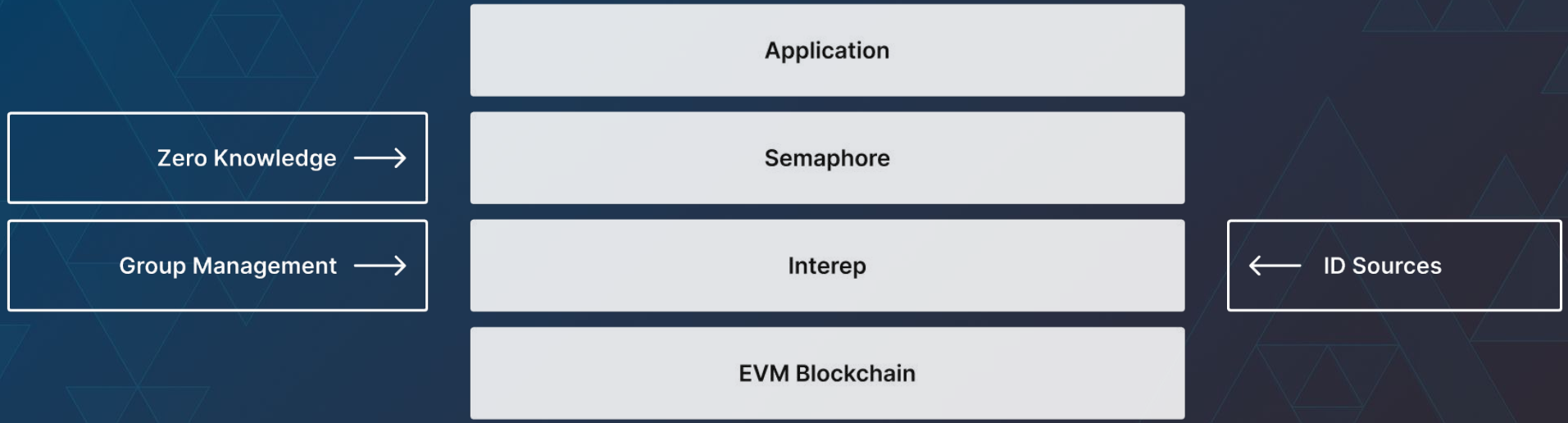
but we need to filter out the bots!



What does an Interep application look like?

The Application Stack.



Identity Providers - Social

- Twitter
- Reddit
- GitHub
- More to be added...

Identity Providers - Other

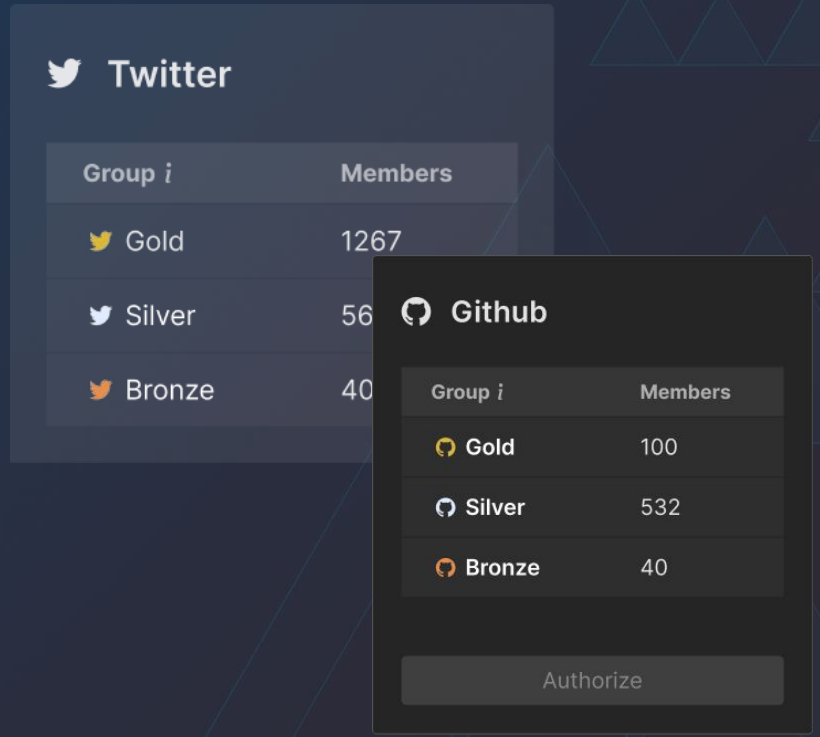
- Email
- Government authorities
- Curated groups
- Other ID projects
- On-chain sources

Semaphore

- Semaphore groups are membership sets
- Members may *signal* on a *topic*
- e.g.: Signal = Vote, Topic = Proposal
- Strong privacy guarantees

Groups

- Users prove membership with ID source
- Multiple tiers
- Groups represent inherent levels of guarantee
- Strong Guarantees/smaller pool vs weaker guarantees/large pool
- Interep groups can be shared across applications



Joining a group

Prove ownership

User proves ownership of the web2 ID, e.g. via OAuth

Tier assessment

Data from the ID source is used to assess the group tier.

Connect to Eth account

User signs a message with their chosen Ethereum account.

A semaphore ID is returned. This will be used in the application.

The link between the web2 ID and the Eth account remains private

On-chain Groups

- Curated groups, or
- On-chain ID sources, e.g. NFT owners

Applications

- Private voting
- Social networks
- Anti-spam. (see Rate Limiting Nullifier)
- Fair airdrops
- Sybil-resistant faucets

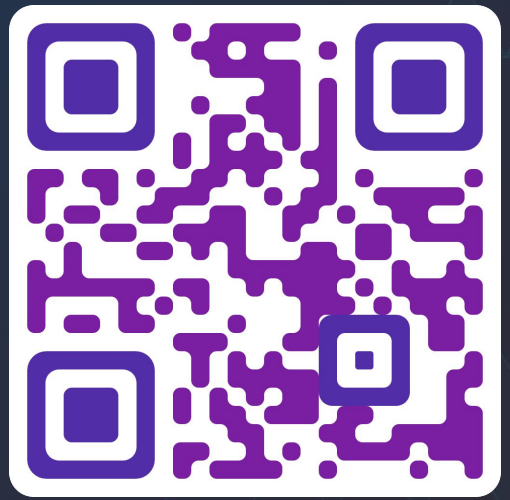
Where are we heading?

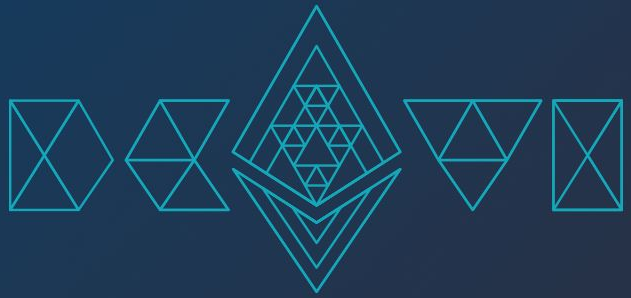
Our aspiration with Interep is that in building applications on Ethereum that rely on identity, we don't need to discard the relationships and reputation we've built up in the centralised world - but we don't need to bring along the opportunities for surveillance or misuse. We can have applications that respect personal privacy.

Our Ethereum accounts can become more contextual, more relational, more social, and more credibly human.

Links

- APP: https://interep.link
- DOCS: https://interep.link/docs
- CODE: https://github.com/interep-project





Thank you!

Geoff Lamperd

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