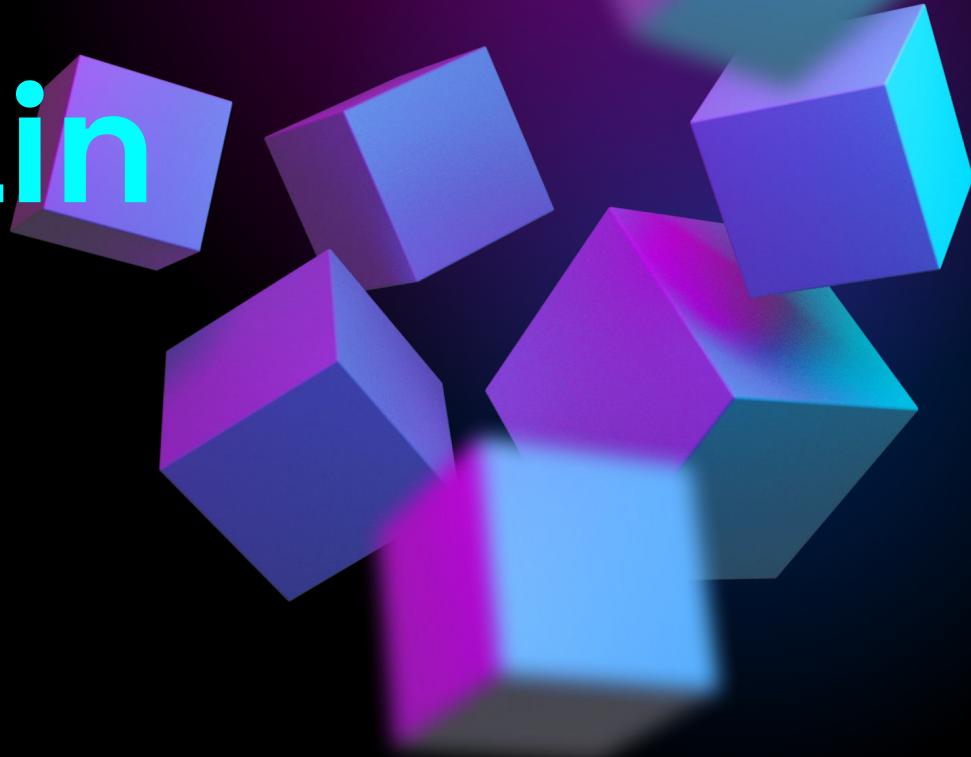


Efficient cross-chain fuzzing

Michal Převrátil

EthereumZuri.ch 2023





Hi 🙌

Michal Převrátil

Lead developer of security tooling for
Ethereum @ Ackee Blockchain

- Woke 

- Tools for Solidity 



@AckeeBlockchain
ackeeblockchain.com



About us

Blockchain security audits 

Development of open source security tools 

Onboarding developers to blockchain 



@AckeeBlockchain
ackeeblockchain.com



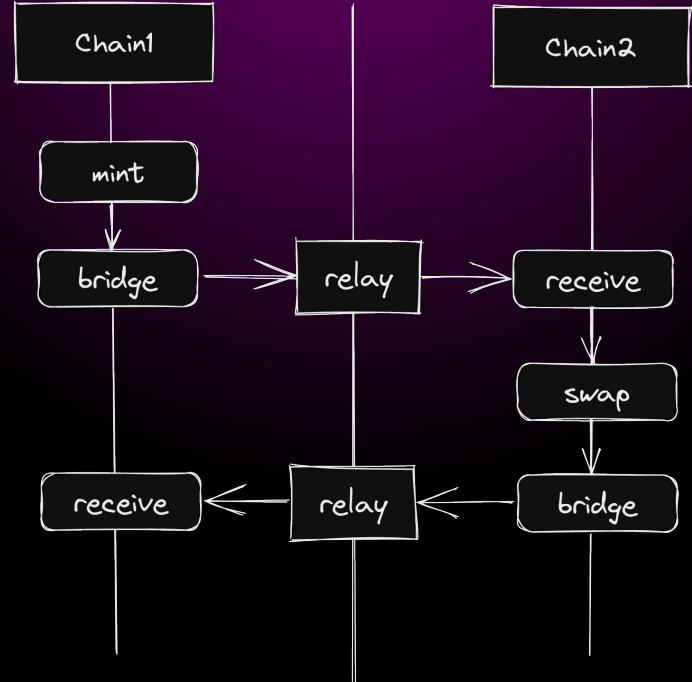
We work with



Cross-chain testing

TRUE cross-chain testing

- 2 or more development chain instances
- relaying implemented in tests
 - catching events and calling contracts on the destination chain
- mocked gateway/endpoint or validation/authentication module



Fuzzing

Fuzzing Solidity projects

- random inputs for contract functions
- random sequence of executed functions
 - random contract on random chain
- checking invariants
 - after each executed function?
- self-driven
 - only invariants are defined
 - e.g. Echidna
- user-driven
 - “tasks” / execution steps and invariants are defined
 - check code coverage and improve tests
 - e.g. Woke, Forge

Meet Woke fuzzer

ackeeblockchain.com

<https://t.ly/bLuq>

<https://github.com/Ackee-Blockchain/ethereumzurich-2023-workshop-fuzzing>

ackee | blockchain
security

Email hello@ackeeblockchain.com

Twitter [@AckeeBlockchain](#)

Telegram [@josef_ackee](#)