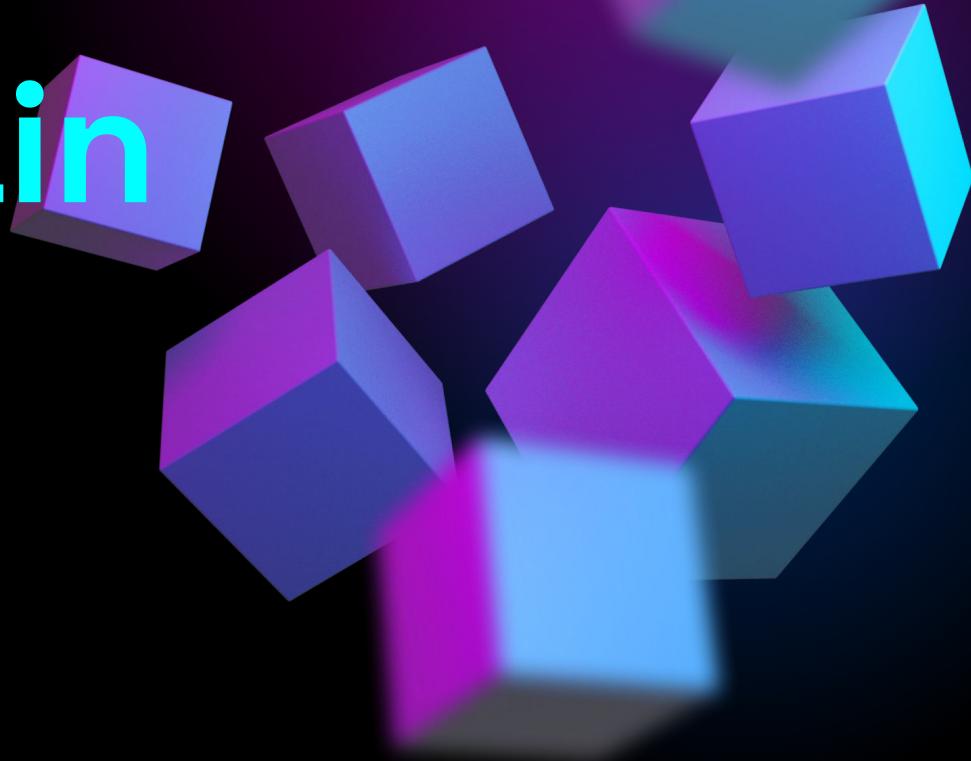


# Efficient cross-chain fuzzing

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Hi 🙌

Michal Převrátil

Lead developer of security tooling for  
Ethereum @ Ackee Blockchain

- Woke 

- Tools for Solidity 



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## About us

Blockchain security audits 

Development of open source security tools 

Onboarding developers to blockchain 



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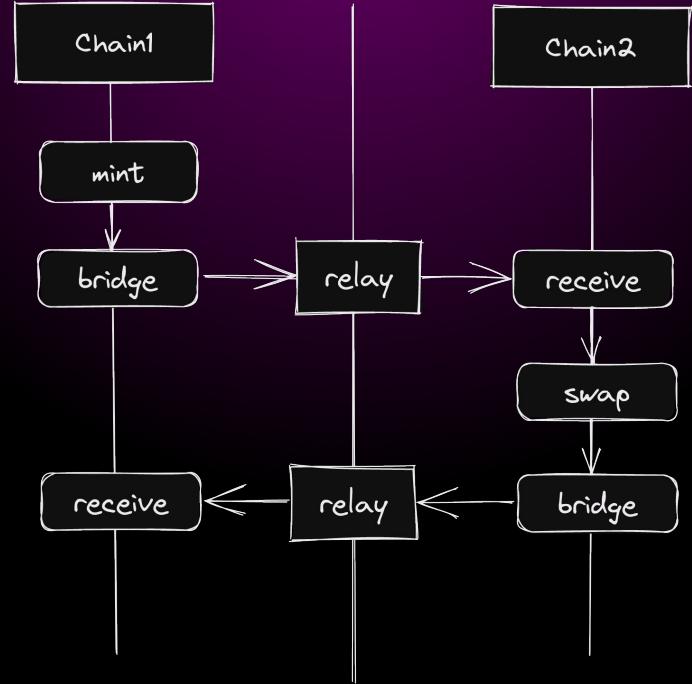
We work with



# 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>



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