

Rust and the Blockchain

“A love story”

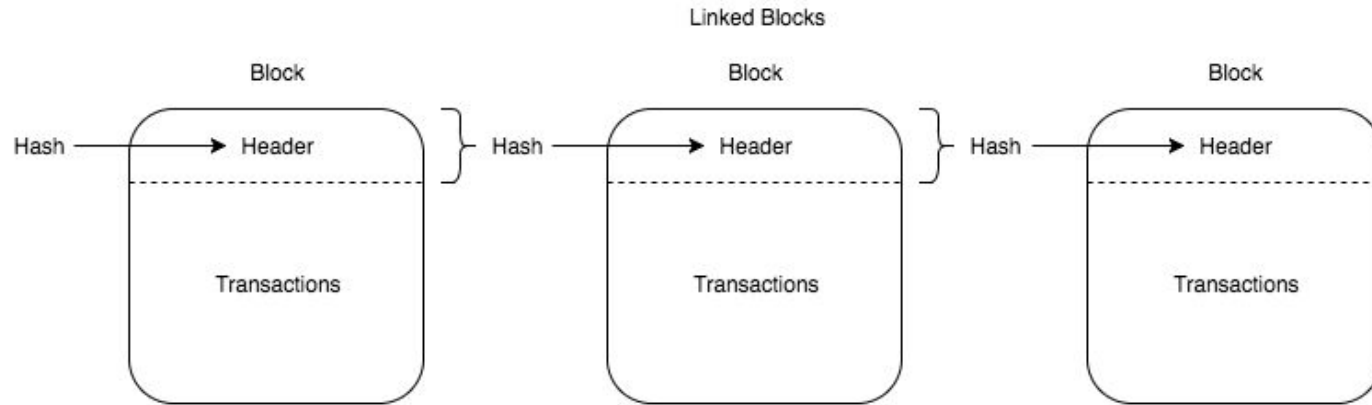
MadRust meetup

May 23rd, 2018

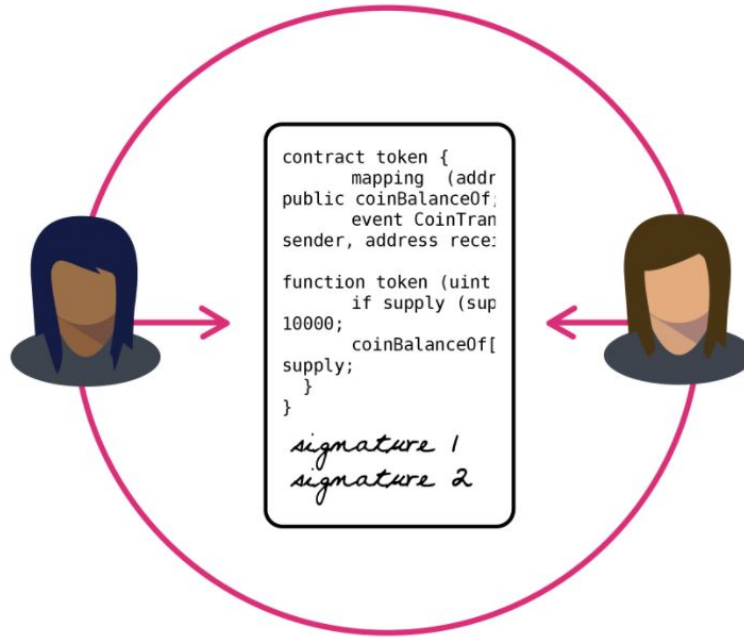


witnet

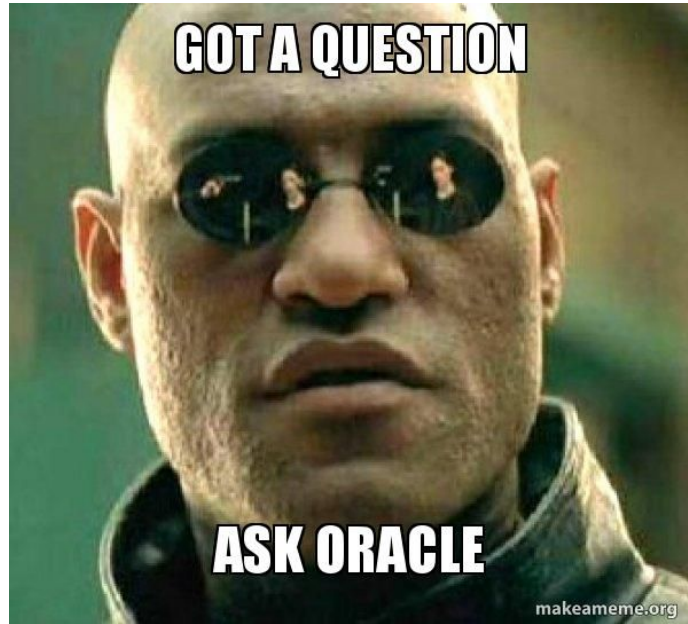
Block...what?



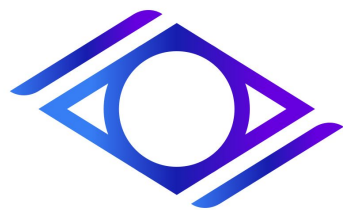
Smart contracts



The oracle problem

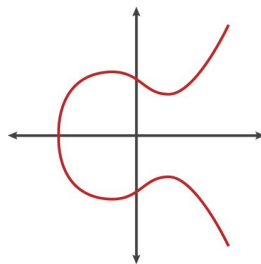
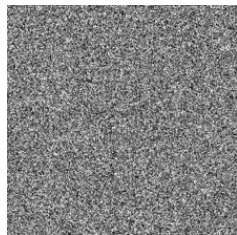


A decentralized Oracle Network



witnet

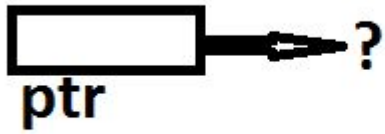
Writing crypto has always meant using C / C++



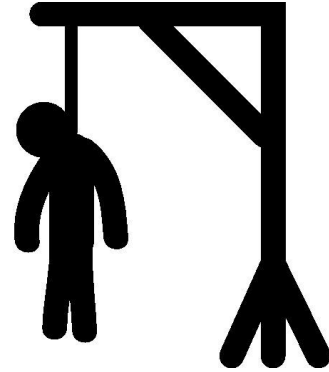
**Crypto-currencies
are no exception**



C / C++ are scary



=

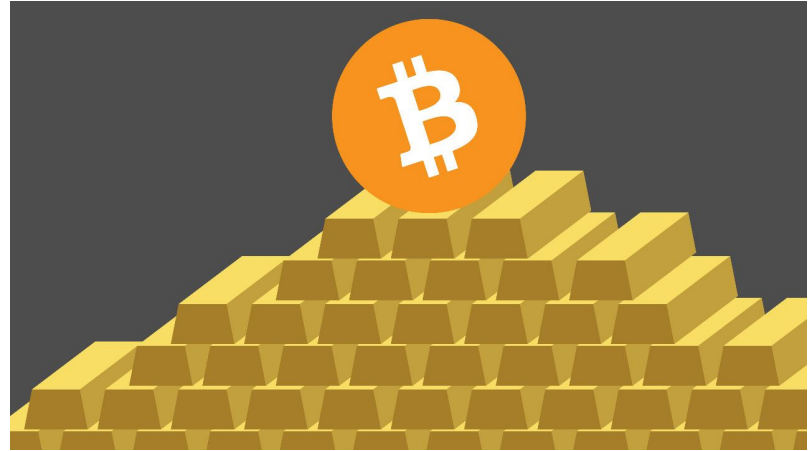


C / C++ are scary

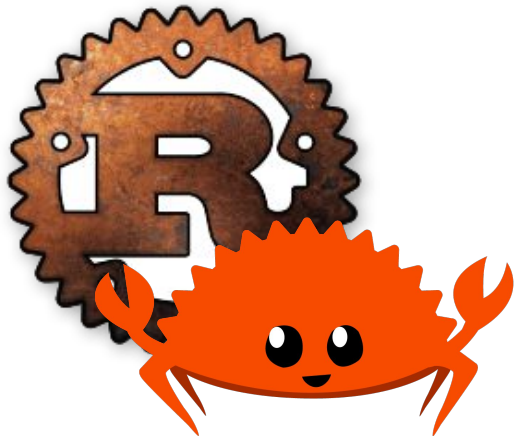


- Dangling pointers
- Memory leaks
- Undefined behavior
- Buffer overflow
- Race conditions
- User-managed memory with no GB
- Lack of booleans
- Poor error handling
- “goto” and wild branches
- Dead/unreachable code

**In a blockchain,
the stakes are too high**









Rust to the rescue!












- Memory safety without GB
- Fearless concurrency thanks to ownership model
- High level of abstraction
- Negligible runtime compromise
- Human-friendly compiler
- Some degree of functional programming and metaprogramming
- AWESOME COMMUNITY

Rust in Witnet






 [witnet / rust-witnet](#) 


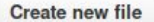



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 Code  Issues 4  Pull requests 0  ZenHub  Projects 1  Wiki  Insights  Settings






An in-progress open source implementation of the Witnet protocol written in Rust. <https://witnet.io> 

[witnet](#) [blockchain](#) [smart-contracts](#) [dag](#) [cryptocurrency](#) [oracles](#) [protocol](#) [p2p](#) [rust](#) [Manage topics](#)

 26 commits  1 branch  0 releases  3 contributors  GPL-3.0

Branch: **master**     

 **aesedepece** Hide all unused variables behind underscores Latest commit 3a7bcb9 on Feb 9

 .hooks	Basic unified CLI for server/wallet/etc.	3 months ago
 chain	Add missing documentation so that the project compiles with the deny(...	3 months ago
 config	Deny compilation for code missing documentation	3 months ago
 core	Add missing documentation so that the project compiles with the deny(...	3 months ago
 keychain	Basic witnet_keychain crate	3 months ago

Other rust-powered blockchain projects



**The future looks bright
for Rust and blockchain
technology.**

Don't miss out!