### gov4git

# practical, secure, programmable governance for open-source communities

Petar Maymounkov

Protocol Labs / Microsoft Research / GitHub / RadicalXChange

## Problem: Effective communities need formal, transparent, secure, evolvable governance

- referendums for code changes
- polls for prioritizing work
- modern voting systems (quadratic voting, diversity discounting)
- community-scoped tokens to reflect contributions (voting credits, badges, SBTs)
- member token account services
- member roles
- interop with intersecting communities and public blockchains

# There are no accessible, cheap, comprehensive solutions.

We want to bring barrier-to-entry to zero with a flexible out-of-the-box solution.

### Market: Needs for governance automation are largely unserved

- early stage pre-funding projects
- poorly funded initiatives (labor unions)
- non-technical communities (journalists, activists, authors, artists)
- developing world
- authoritarian and censored regions
- disaster and war zones
- infrastructurally autonomous communities

## Value: Practical blockchain-level transparency, trust and security at a fraction of cost

- commodity hardware (phone, raspberry pi)
- zero financial cost
- no connection to public Internet required
- deployable by non-technical users
- easy policy and mechanism development

## Technology: Architecture for building decentralized applications over git as infrastructure

- building blocks
  - identity (DNS → git → public keys)
  - communication (write to git, read from git)
  - trusted computation (Byzantine consensus across git repos)
- infra
  - git as backend
  - computation on the client

### Differentiation: gov4git vs blockchains

Abstraction		Trusted Computation		
Tenancy		Single smart contract	Multiple smart contracts	
Applications		Single community governance	Cross-community transactions	
State Machine Replication Technology		Byzantine broadcast	Tendermint HotStuff	Proof-of-??? Longest chain Nakamoto Consensus
Products		gov4git	Cosmos, Polygon	Ethereum, Filecoin, etc.
Trust model		honest majority		highest power
Infra	Storage	networked git	high-end custom servers	high-end custom servers
	Compute	commodity client (web, mobile, home)		
Latency		minutes	seconds	seconds
API		file-system protocol	network protocol VM	VM
Programming Technology		any	Go, Protobuf, Move	Solidity, WASM, AssemblyScript, etc.

#### Economics: A decentralized public protocol

- gov4git foundation, steward of protocol and implementation
- token representing voting rights in gov4git development
  - planning and roadmapping
  - feature and product proposals
  - specifications
  - work prioritization

#### Team: Roots in Web3 and digital democracy

- Petar Maymounkov (Protocol Labs)
- Evan Miyazono (Protocol Labs)
- Glen Weyl (Microsoft Research, RadicalXChange)
- Kasia Sitkiewicz (GitHub)
- Leon Erichsen (RadicalXChange, GitCoin)
- Sangeet Parashar, Shivani Thakur, Jason Entenmann, Siddhant Kasat (Microsoft)
- Austin Akers

### Ask: What we are looking for

- \$3M funding
- 2 year runway
- engineering / product / pr / customer support / community relations

#### Thank you!

- Email <u>petar@protocol.ai</u>
- Github <a href="https://github.com/gov4git/gov4gi
- Twitter <a href="https://twitter.com/gov4git">https://twitter.com/gov4git</a>

- Whitepaper
- In the media
  - <a href="https://www.microsoft.com/en-us/research/?post\_type=msr-blog-post&p=928248">https://www.microsoft.com/en-us/research/?post\_type=msr-blog-post&p=928248</a>
  - <a href="https://www.microsoft.com/en-us/research/group/decentralized-social-technology-collaboratory/">https://www.microsoft.com/en-us/research/group/decentralized-social-technology-collaboratory/</a>
  - https://protocol.ai/blog/protocol-labs-and-plurality-book/