Blockchain Requirements for *Safe* AI Governance
Why The Future Doesn’t Need Us

Intelligent Machines

Bill Joy: Biological species almost never survive encounters with superior competitors.

Stephen Hawking: “The development of full artificial intelligence could spell the end of the human race.”

Elon Musk: “With artificial intelligence we’re summoning the demon.”

Sociopathic Corporations

If corporations are indeed “persons,” their mental condition is accurately described as pathological. They have no innate moral impulses, exist solely for the purpose of making money and are systemically driven (indeed, legally bound) to do whatever is necessary to increase revenues and profits, with no regard for ethical issues.

Capitalism & Super-capable Selfish Human Beings

- How much damage could a single prehistoric human being with a spear do?
- How much damage can be done by a wealthy/brilliant teenager with internet?
The Current Reality of AI

Joseph Stiglitz on artificial intelligence: "We're going towards a more divided society"

Which is the easier way to make a buck: figuring out a better way to exploit somebody, or making a better product? With the new AI, it looks like the answer is finding a better way to exploit somebody.

People worry that computers will get too smart and take over the world, but the real problem is that they're too stupid and they've already taken over the world.
Compounding Societal Factors

- Lack of Transparency
  - Intentional & “Unavoidable” Black Boxes

- Lack of Accountability
  - Anonymity &
  - “Too Big To Fight” and/or “Too Big To Fail”

- Lack of Truth/Weaponized Narratives

- Perceived Lack of Usable Definitions of Morality
Digital Wisdom Projects

- **Sprouts (formerly 50PH14)** - Engineering a Safe Artificial Entity w/ Human-Level Intelligence by Crowd-sourcing a Moral “Seed AI”

- **Whately** - Debate-mapping on the Blockchain to Solve Wicked Social Problems via Collaborative Modeling & Argumentation
  
  - Starting with a comprehensively safe/moral AI motivational system

- **GAlaBC** – A Governance AI and Blockchain Eco-System to Host and Fund Whately & Sprouts
  
  - Virtual World/Model populated by
  
  - Blockchain-based composite entities powered by
  
  - SEC-compliant funding (Reg CF, Reg D and Reg A)
Scalability (Sufficient to Support Micro-transactions & Heavy Voting)

Visa’s average usage is “only” 1700 tps but micro-transactions & voting will quickly increase requirements by orders of magnitude.
Scalability Solutions

- Don’t use network-wide free-for-all to determine who writes blocks
- Move some transactions off chain (Lightning/Raiden)
- Move some transactions to child chains (Plasma)
- Split the network into identical sub-chains (Sharding)
- Develop an ecosystem of diverse but inter-operable chains
Generic Ecosystem Requirements

- Every blockchain must support a Universal Atomic Swap Protocol
  - Most sharding is easily implemented with just this and a sub-chain address directory
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:. The ecosystem needs a Universal Description, Discovery and Integration Directory.

Any smart contracts must be in a non-Turing-complete functional language.
- With a proof assistant for contract analysis and verification.
Governance Ecosystem Requirements

- Enforced membership and/or interaction requirements for blockchains
  - bonding, escrow and insurance should all be options in the UDDI directory

- Know Your Customer/Anti-Money Laundering requirements for users
  - prevents Sybil attacks

- A 100% stable utility token 100% backed by escrowed reserves

- A solid governance system to resolve issues like the DAO
  - an ecosystem cannot easily fork (and even fissioning would be ugly), but
  - the ecosystem must be able to coherently act when a member forks
Thank You!

Who wants to join us?