Blockchain Beyond the Hype: Hackpack

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Workshop Lead Contact

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Pre-Workshop Checklist

- Review the **Workshop Syllabus** and brush up on prerequisite knowledge

- Brush up on basic high-level understanding of Cryptography such as hash functions, asymmetric encryption, and signatures.

- Get ready to learn! 👩‍🎓

Additional Resources

Workshop-Specific Resources

Workshop syllabus - This workshop's motivator, prerequisites, learning outcomes and schedule.

Ethereum Whitepaper - For good general Blockchain understanding

Ethereum Yellowpaper - Goes very very deep into Ethereum's Virtual Machine, and how exactly does it work to execute smart contracts correctly and consistently.

Tendermint - A framework for building separate blockchain networks specialised in running any particular computer program. Has a different consensus algorithm called "pBFT" you might want to look into. It has different compromises compared to Ethereum, Bitcoin.

Cosmos SDK - The standard way of developing applications for use in Tendermint blockchains. Written in Go, the Cosmos SDK provides you with a convenient, secure, and modular way of developing blockchain applications.

Cosmos Network - A blockchain network that aims to connect many different Tendermint blockchain networks with the idea that they form one ecosystem. Keep in mind that Tendermint blockchains have their own independent consensus mechanism, and Cosmos does not change that. They propose an "Inter Blockchain Communication" protocol that allows individual blockchains with otherwise separate consensus building mechanisms to trust each other. It is still WIP and information about it is scarce, but from what they've published, how it works is at least very interesting.

Polkadot - A competitor to Cosmos Network, Polkadot's advantage is that it takes an entirely different take on consensus protocols. Polkadot aims to create an ecosystem with interoperating blockchains, but its compound blockchains do not have independent consensus. In fact the entire group of all blockchains runs under the same consensus. Usually, in order for that to happen, you have to sacrifice scalability by a long shot. However, Polkadot has worked around this with a clever consensus protocol.

Parity Substrate - The standard (and only!) way of developing blockchain applications for the main Polkadot blockchain. Written in rust, it also helps you develop convenient and secure blockchain applications.

Awesome lists on Blockchain! - Take a look at those, a very broad collection of useful resources.

General Resources

Hack the North 2020++ Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this week.

All Hack the North 2020++ Workshops