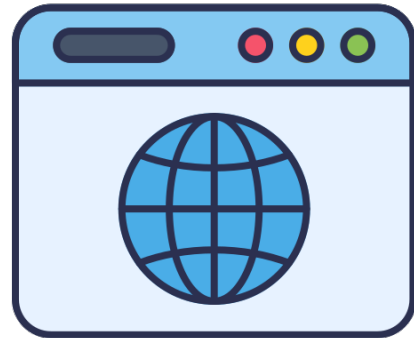




Building a Multi-Cryptocurrency Node Explorer

Cryptocurrency networks like Bitcoin and Ethereum run atop global peer-to-peer (P2P) networks over the Internet responsible for disseminating network messages including blockchain data and information on network participants. These networks have the property that anyone can join the system if they know at least one peer, and can bootstrap off that peer to learn about others in the network. One can leverage such a *peer discovery* protocol to discover all peers in the network.

In previous theses, students have used such discovery protocols to build *crawlers* that discover all known nodes in a network for several cryptocurrency networks including Bitcoin, Ethereum, Ethereum Classic, Bitcoin Cash, and others. The goal of this thesis is to systematize the crawling of all these networks and build a web-page to display analyses of the crawls. The project will involve managing daily and hourly data collection, and building a pipeline to display up-to-date network information on a new website to serve as a tool for the community.



Candidate Profile: This project is heavily implementation-based, with some data analysis and visualizations. An ideal candidate for this project has previous experience with web development, and is comfortable running and making minor changes to code in rust and go-language, and is comfortable programming in a linux environment. This would also make a good group class project.

Interested? Please contact me for more details!

Contact

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