

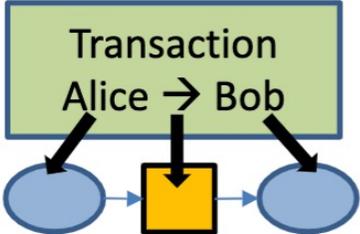
README

Bitcoin address-transaction bipartite graph

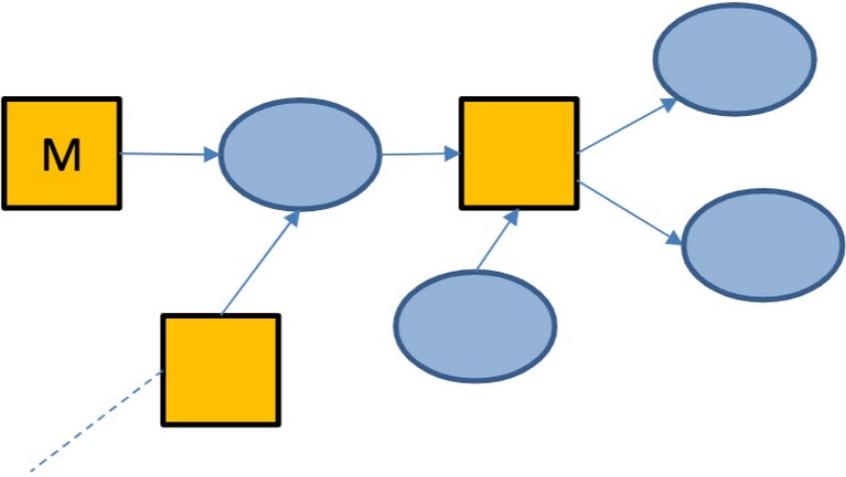
If you use the datasets, please cite following papers.

1. Gaihre, Anil, Yan Luo, and Hang Liu. "Do bitcoin users really care about anonymity? an analysis of the bitcoin transaction graph." *2018 IEEE International Conference on Big Data (Big Data)*. IEEE, 2018.
2. Gaihre, Anil, Santosh Pandey, and Hang Liu. "Deanonymizing cryptocurrency with graph learning: The promises and challenges." *2019 IEEE Conference on Communications and Network Security (CNS)*. IEEE, 2019.

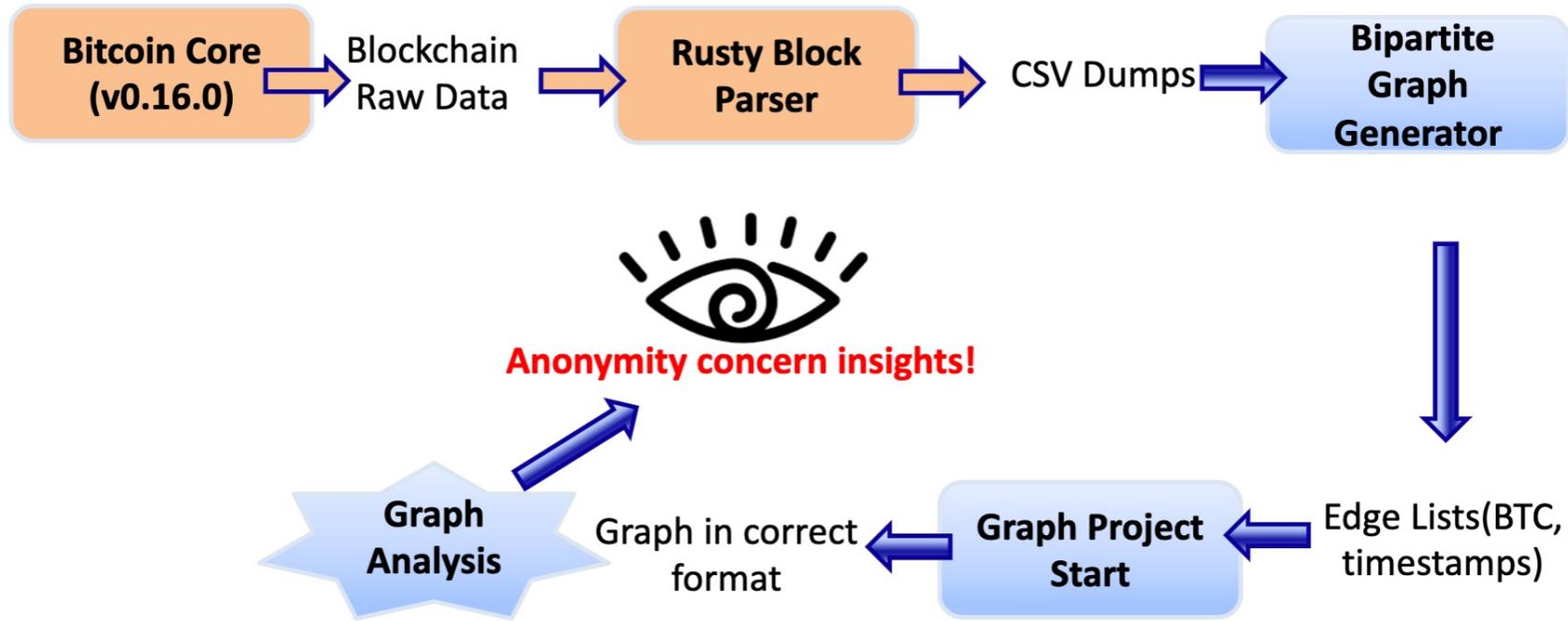
Bitcoin Transaction Graph Looks Like



○ Address □ Transaction □ M Mining Transaction



Constructing Bitcoin Transaction Graph



References:

- Bitcoin Core Software. Available at <https://bitcoin.org/en/bitcoin-core/>
- Rusty blockparser github repository. Available at <https://github.com/gcarq/rusty-blockparser>



Graph project start: https://github.com/asherliu/graph_project_start

Other information

- The large file is the graph is in text format
 - First 2 columns represent the edges in the graph
 - I and O represent an edge that is input to a transaction node or output of the transaction node.
 - The remaining column represents the weight of the edge i.e., Satoshi (BTC)
- The 3 files are the dataset in binary format. The graph reader is attached herewith.
 - The `..begin_pos` and `..csr` files are files for the graph in CSR format.
 - The `...weight` is the Satoshi/Bitcoin file.