information propagation on blockchians
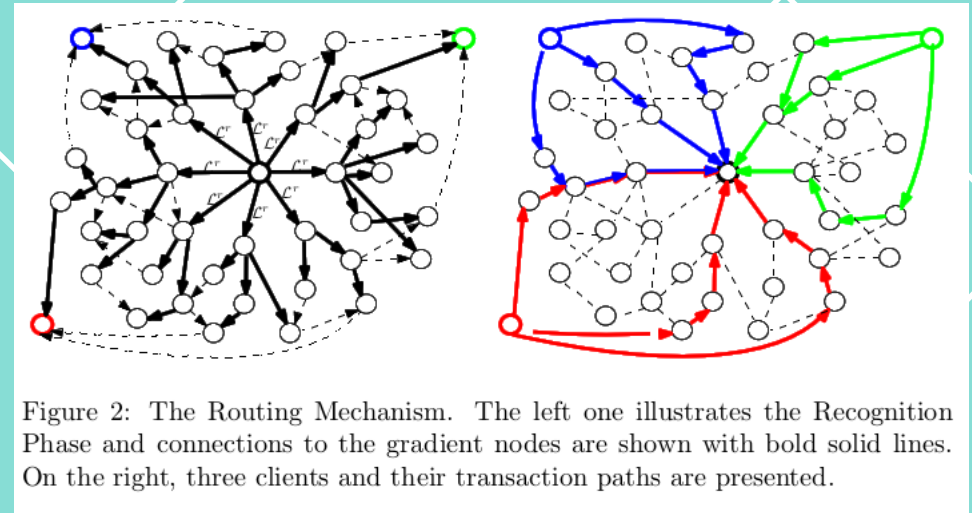
1.decentralized
2.Collective maintenance
3.Information cannot be tampered with
4.No trust system

1.no privacy
2.Security problem
3.Delay in data validation.
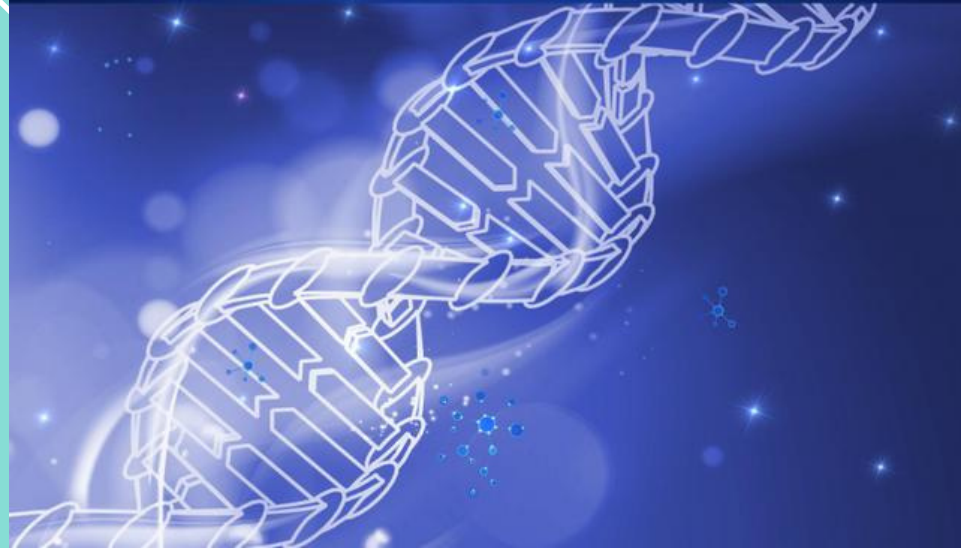
a routing mechanism

the size of the network to the scale of average shortest path length

Figure 2: The Routing Mechanism. The left one illustrates the Recognition Phase and connections to the gradient nodes are shown with bold solid lines. On the right, three clients and their transaction paths are presented.

anonymity

Algorithm 1: DANDELION SPREADING. $\mathcal{N}_{out}(G, v)$ denotes the out-neighbors of node v on directed graph G.

Input: Message X_v, source v, anonymity graph G, spreading graph H, parameter $q \in (0, 1)$
anonPhase $\leftarrow$ True
head $\leftarrow v$
recipients $\leftarrow \{v\}$
while *anonPhase* **do**
    /* forward message to random node   */
    target $\sim$ Unif$(\mathcal{N}_{out}(G, \text{head}))$
    recipients $\leftarrow$ recipients $\cup \{X_v\}$ from head to target
    head $\leftarrow$ target
    $u \sim$ Unif$([0, 1])$
    if $u \leq q$ **then**
        | anonPhase $\leftarrow$ False
    end
end
/* Run diffusion over H from 'head'   */
DIFFUSION(X_v, head, H)

1) Anonymity Phase
2) Spreading Phase
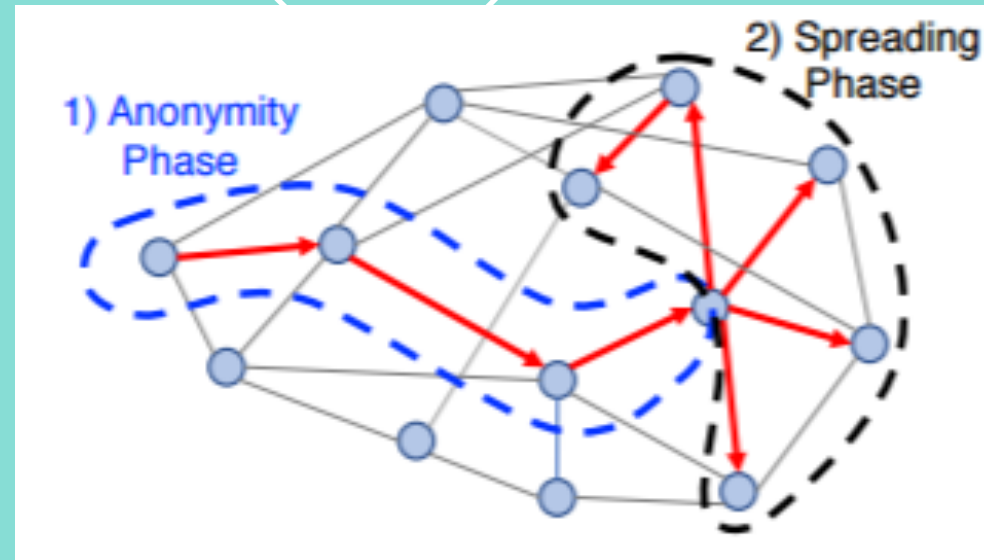
Genetic algorithm
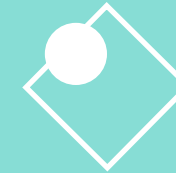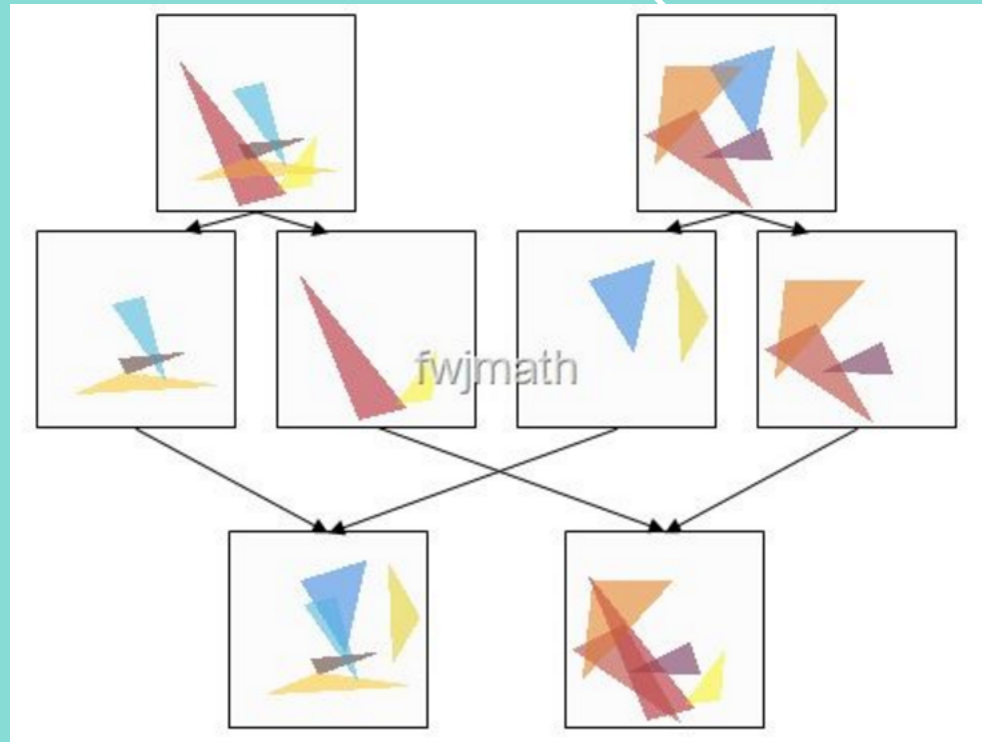
1.the way to stimulate information propagation and the fee share
2.parameter selection

Thanks