Summary\_of\_<https://airccj.org/CSCP/vol8/csit89509.pdf>

This study proposes a blockchain-based security framework – Sapiens Chain. In combination with artificial intelligence, this framework makes it possible to detect vulnerabilities automatically and handle website, application and blockchain securities simultaneously. In the proposed framework, the users submit tasks through the browser, fog nodes distinguish the tasks and assign fragments of tasks to selected nodes. Finally, results are gathered into a report. The structure of the chain consists of 4 layers- resource, transport, contract and application layer, each performing specific functions. The operation mode consists of fog and ordinary nodes, scheduling and security algorithms, Reward and Claim modes as well as incentive mechanisms for encouraging node participation and punishment mechanisms to tackle node dishonesty. The experimental data confirms that Sapiens Chain framework can distinguish between websites at high and low risk levels as well as it can detect vulnerabilities and provide corresponding suggestions. Lastly, the study discusses the applications of the proposed framework such as website, application and smart contract securities and Shared Economy.

My views:

This was indeed a very interesting and unique paper. The name itself arouses curiosity – a network of humans. Understanding this paper was quite a task but I can say I am successful. The highlight of this paper is the concept of one node playing many roles and the interaction between those roles. The diagram explains this well.