Propositions

accompanying the dissertation

Decentralization and Disintermediation in Blockchain-based Marketplaces

by

Marinus Abraham de Vos

1. Pair-wise accounting is an effective approach to decentralize and disintermediate the fundamental aspects of blockchain-based marketplaces. *[This thesis]*
2. The detection of counterparty fraud in combination with community exclusion is a viable strategy to facilitate low-risk exchange of assets between traders without central authority or trusted intermediaries. *[This thesis]*
3. Decentralized matchmaking in peer-to-peer markets can be achieved with both efficiency and fairness guarantees. *[This thesis]*
4. Trying to eliminate all risks in electronic marketplaces is futile and counterproductive.
5. Atomic swaps are far from atomic.
6. Smart contracts are the Achilles heel of any blockchain system and are likely to lead to the downfall of Decentralized Finance (DeFi).
7. Complicated ideas cannot result in practical decentralized systems.
8. Any decentralized system is prone to centralization.
9. Implementing a distributed algorithm is an undervalued but excellent approach to thoroughly understand its working and limitations.
10. Unambiguous government communication is a crucial requirement to reduce the spread of the COVID-19 virus.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors Prof.dr.ir. D.H.J. Epema and Dr.ir. J.A. Pouwelse.