

Abstract: The Solana network is in a phase of actively searching for, and ultimately choosing its MEV supply chain. The MEV supply chain is critical to the future performance and business models of the Solana network. One approach is to replicate the model established on Ethereum, building a searching and block building marketplace. This path is not free from downsides, such as artificially introducing a global mempool that would increase Solana's latency, and increased risk of centralization and censorship. In this paper we review some of the features of the block building marketplace, and what retrofitting it onto Solana would entail. We also propose an alternative model, the Solana MEV client, that would handle opportunities directly in the banking stage of the validator, without the need to restructure core parts of the protocol. The MEV client enables permissionless and decentralized extraction that benefits users through transparent and ethical strategies, as well as increased financial returns for network participants.

@misc{chorusone2023mevsolana, title={Breaking Bots: MEV on Solana and how to prevent frontrunning, spam attacks and centralization}, author={Thalita Franklin and Enrique Fynn and Umberto Natale and Ruud van Asseldonk}, url={https://uploads-ssl.webflow.com/63fdf8c863bcf0c02efdffb6/6453962e0884407fba666e22\_Breaking%20Bots.pdf}, publisher={Chorus One} }

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