Recently, I researched if the effect of bundles can be mimicked on Arbitrum before bundles are natively supported. I am sharing the methods, results and findings here: <u>Bundle imitation on Arbitrum - HackMD</u>.

The main goal of the research was to investigate whether transactions submitted in quick succession or via BatchRPC end up positioned next to each other within the same block, while also preserving their original order of submission.

Key findings:

- Introducing 5-10ms delay between the submission of two transactions preserved the order of transactions and placed them adjacent to each other in 76-79% of the cases submitted from Oregon.
- Submitting multiple transactions via BatchRPC placed each transaction in a new block; in >99% of the cases, the blocks were sequential.
- The geographical proximity to the sequencer and transaction volume affected the results.

Would appreciate your feedback!