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A Token-Based Voting System for Rating News Sources

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Abstract:

Statement of the Problem:
There is a stigma associated with newspaper companies that they tend to bend the truth and relay inaccurate information. It may often be quite difficult for those that are not well versed with the internet, or even those that are, to differentiate credible news sources from news sources that aren't credible. In an attempt to resolve this societal issue, we proposed a rating system where block chain technology is utilized in order to financially incentivize raters to relay trustworthy ratings of new sources in a decentralized manner.

Methodology and Theoretical Orientation:
Our model takes much inspiration from Token-curated registries which are decentralized recommender systems developed on the Ethereum block chain designed to collect high-quality information in a trustless manner. Our TCR-based prototype rates various news sources based on a scale from 1 through 10 where 1 denotes the lowest rating and 10 denotes the highest rating. Voters are rewarded in the form of "Newscoin", a cryptocurrency that voters barter and exchange with. The performance of each voter is evaluated based on the deviation of the voter's rating from the average rating wherein users who vote closer towards the average rating tend to gain profit while voters who vote farther from the average tend to incur losses. The margin of profit is directly proportional to the number of Newscoin that the voter wager. Through this system, voters are effectively financially incentivized to vote truthfully as making a "low quality" vote would cause the voter to lose money. Consumers can rely on the average ratings of the voters to gauge how credible news sources are.

Findings:
Because of the mechanism of the reward/loss system, voting with the objective of solely guessing the average rating in an exploitative manner is discouraged. The system discourages voters from simply voting for the rating that they believe is the average and actually try to make high quality votes because the more people that vote for a rating, there's actually a chance that the yield for that rating may decrease instead. This is portrayed in the sample scenario provided in the poster.

Conclusion & Significance:
We have designed a prototype system for rating news sources based on Token-curated registries which is completely self dependent on the voters themselves and no central authority can intervene in any shape or form. This system has several advantages over other existing systems and can be extended to multiple applications including financial portfolios, rating systems for healthcare, restaurants, and other industries.

Biography

Sean Kim is a high school student that attends Fort Lee High School in Fort Lee, NJ. His interests in cryptocurrency began with digital currencies such as Bitcoin. However, as time passed, he realized that cryptocurrency and block chain technology as a whole has the potential to serve purposes beyond recording digital transactions. This led him to develop "A Token-Based Voting System for Rating News Sources". He is currently working on other cryptocurrency and block-chain related projects.

About Research Topic

This research project was based heavily off of Token-curated registries. Token-curated registries are decentralized systems where tokens are used to incentivize quality curation of information. For example, a community of food critics can vote on whether or not a restaurant should be curated on a list of recommended restaurants. Each voter stakes a vote and those with the unpopular vote will lose a bit of tokens while those in the majority receive tokens. When consumers find the curated list to be helpful, the values of the tokens.

References:

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