Token-Curated Registry with Citation Graph: Open Review

Kensuke Ito,[*†] Hideyuki Tanaka[‡]

Reviewers: Reviewer A, Reviewer B

Abstract. The final version of the paper "Token-Curated Registry with Citation Graph" can be found in Ledger Vol. 4 (2019) 191-209, DOI 10.5915/LEDGER.2019.182. There were two reviewers involved in the review process, neither of whom have requested to waive their anonymity at present, and are thus listed as A and B. After initial review by Reviewers A and B, the submission was returned to the authors with feedback for revision (1). The authors resubmitted their work with revisions. It was once again sent to Reviewers A and B, who indicated that the revisions made were sufficient to address their concerns, thus ending the peer review process.

1. Review

Reviewer A

Does this paper represent a novel contribution to cryptocurrency or blockchain scholarship?:
Not sure

Is the research framed within its scholarly context and does the paper cite appropriate prior works?:
Yes

Please assess the article's level of academic rigor:
Excellent (terms are well defined, proofs/derivations are included for theoretical work, statistical tests are included for empirical studies, etc.)

Please assess the article's quality of presentation:
Excellent (the motivation for the work is clear, the prose is fluid and correct grammar is used, the main ideas are communicated concisely, and highly-technical details are relegated to appendixes).

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[*] bc1q3w7grsh4jd074q7m5j6nl8dt2ffmaaflvgpmuy
[†] Kensuke Ito (k-ito@g.ecc.u-tokyo.ac.jp) is Ph.D. student at the University of Tokyo.
[‡] Hideyuki Tanaka (tanaka@iii.u-tokyo.ac.jp) is a professor at the University of Tokyo.

How does the quality of this paper compare to other papers in this field?:
Top 20%

Please provide your free-form review for the author in this section:

The present manuscript introduces CitedTCR as new protocol incorporating the expertise of anonymous curators into a token-curated registry (TCR). CitedTCR leverages a citation graph for curator assignment and uses a peer-prediction mechanism to compute the number of reward tokes paid to the curators. The study clearly highlights the benefits of CitedTCR but also addresses possible issues and necessary future development steps. Related work is appropriately discussed. The authors claim that CitedTCR is the first approach that uses a peer-prediction mechanism in TCRs. It is confirmed theoretically and experimentally that CitedTCR has reasonable utility.

The work is original and very well written. It is very interesting, innovative, and significantly contributes to the topic of recommender systems. Besides minor correction of typos, I do not see the need for revision of the manuscript. I recommend acceptance in its present form.

Reviewer B

Does this paper represent a novel contribution to cryptocurrency or blockchain scholarship?:
Yes

If you answered "yes" to the previous question, in one sentence, describe in your own words the novel contribution made by this paper:
Proposal of a token curated registry based on combination of Personalized Page Rank and "DG13"

Is the research framed within its scholarly context and does the paper cite appropriate prior works?:
Yes

Please assess the article's level of academic rigor:
Good (not excellent but a long way from poor)

Please assess the article's quality of presentation:
Good (not excellent but a long way from poor)

How does the quality of this paper compare to other papers in this field?:
Top 50%

Please provide your free-form review for the author in this section:

The paper addresses an interesting problem. Thus, still having some major limitations, the chosen approach of adding expertise into TCR-based curation seems promising. It is well introduced with background, theory and an experimental study based on existing data sets.

Mostly, the paper is well written. However, I find part 3 somewhat hard to digest. This is also my main concern about the paper. This is partly due to some smaller problems stopping the reader's flow, e.g.

- Last paragraph p. 5: "composed of the references of x and x"; would be easier to grasp if it would be "composed of x and the references of x"

- P. 6, (2): "Select $n(\geq 2)^{\{42\}}$" -> Maybe comment 42 and 43 could be combined? Additionally, this part could be better structured, with a more clear introduction of used variables, and written slightly more formal (repetitive but more clear formulation). In my opinion, this section needs a rework, focussing on readability and understandability.