

Master Thesis

Developing Address Clustering Heuristics for Account-Based Blockchain Networks: An Analysis based on a Specific Address Set

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Abstract

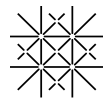
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Keywords: Keyword 1, Keyword 2, Keyword 3, Keyword 4.

JEL: X00, X00, X00

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Declaration of Independent Authorship

I attest with my signature that I have written this work independently and without outside help. I also attest that the information concerning the sources used in this work is true and complete in every respect. All sources that have been quoted or paraphrased have been marked accordingly. Additionally, I affirm that any text passages written with the help of AI-supported technology are marked as such, including a reference to the AI-supported program used. This paper may be checked for plagiarism and use of AI-supported technology using the appropriate software. I understand that unethical conduct may lead to a grade of 1 or “fail” or expulsion from the study program.

Dario Thürkauf

A handwritten signature in black ink, appearing to read 'DTh', with a long, thin vertical stroke extending downwards from the 'h'.

1 Introduction

Motivation & Relevance of the topic

Literature Review: Still nascent field, First start with bitcoin/UTXO based, go over to account-based: Victor, Beres et al.

Structure of the paper

2 Preliminaries

Similar to seminar thesis

Account-based blockchains

Ethereum, Polygon

Smart Contracts, EOAs

Transactions, Transfer Events

Privacy-enhancing protocols, Tornado

Metaverse, Decentraland

Token Standards, shorter than in Seminar Thesis, comparable to Metaverse Retailing Paper

3 Data Preparation and Retrieval

Transfer Events, adding Information (isInSet)

Transactions

Filtering, Intra-set transfers

Data Structure, Fields

Additional data

4 Data Analysis

Existing clustering heuristics

Graph-based network analysis

5 Discussion

6 Conclusion

References