Title of the Paper

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Acknowledgements

Abstract

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# Introduction

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# Preliminaries

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# Finding good Factorization Trees

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# Serialization of Data Factorizations

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# Distributed Query Processing in FDB

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# Experimental Evaluation

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In this section we will present experimental evaluation for the main contributions of this project, namely the *COST* function for finding good f-trees (see Chapter 3), the serialization techniques explained in Chapter 4 and D-FDB, the distributed query engine as presented in Chapter 5.

## Datasets and evaluation setup

This section contains information regarding datasets used and the evaluation setup used to record the reported times and sizes.

### Datasets

We used two different datasets throughout the development and evaluation of the above contributions, both described below.

1. *Housing*

This is a synthetic dataset emulating the textbook example for the house price market.

It consists of six tables:

* *House* (postcode, size of living room/kitchen area, price, number of bedrooms, bathrooms, garages and parking lots, etc.)
* *Shop* (postcode, opening hours, price range, brand, e.g. Costco, Tesco, Sainsbury's)
* *Institution* (postcode, type of educational institution, e.g., university or school, and number of students)
* *Restaurant* (postcode, opening hours, and price range)
* *Demographics* (postcode, average salary, rate of unemployment, criminality, and number of hospitals)
* *Transport* (postcode, the number of bus lines, train stations, and distance to the city center for the postcode).

The scale factor ***s*** determines the number of generated distinct tuples per postcode in each relation: We generate tuples in *House* and *Shop*, tuples in *Institution*, in *Restaurant*, and one in each of *Demographics* and *Transport*. The experiments that use the *Housing* dataset will examine scale factors ranging from 1 to 15.

1. *US retailer*

The dataset consists of three relations:

* *Inventory* (storing information about the inventory units for products in a location, at a given date) (84M tuples)
* *Sales* (1.5M tuples)
* *Clearance* (370K tuples)
* *ProMarbou* (183K tuples)

### Evaluation setup

The reported times for the *COST* function and the serialization techniques were taken on a server with the following specifications:

* Intel Core i7-4770, 3.40 GHz, 8MB cache
* 32GB main memory
* Linux Mint 17 Qiana with Linux kernel 3.13

The experiments to evaluate the distributed query engine D-FDB were run on a cluster of 10 machines with the following specifications:

* Intel Xeon E5-2407 v2, 2.40GHZ, 10M cache
* 32GB main memory, 1600MHz
* Ubuntu 14.04.2 LTS
* Linux kernel 3.16

## COST function – Finding good f-trees

TODO

## Serialization of Data Factorizations

# Conclusions and Future Work

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A player faces a dynamic optimization problem of 5 periods. Let denotes the player’s action in period *t*,

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We denote the vector of action choices by . Playing in a period yields an immediately consumption level of *x* at a certain future cost, to be paid at period 4, while not playing yields no consumption and incurs no cost, so

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The player observe *x* in period 1 before she pick her action.

Let denotes total cost for playing *s* games and the number of games played up till and including time *t*.

This paper.[[2]](#footnote-2) Theoretically, ...

The issue of ...

This paper is organized as follows. The next section presents ... Then, Section 3 discusses

the ... Section 4 analyzes the ... Concluding remarks are offered in Section 5.

# References

Ashraf, Nava, Dean Karlan and Wesley Yin. “Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines.” Quarterly Journal of Economics. Vol. 121, No. 2, pp. 635-672. May 2006.

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2. Ashraf et. al [1] uses a ... [↑](#footnote-ref-2)