LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

INSTITUT FÜR INFORMATIK
LEHRSTUHL FÜR MOBILE UND VERTEILTE SYSTEME

MASTER THESIS

Exploring the impact of markets on the credit assignment problem in a multiagent environment

Zarah Zahreddin

Entwurf vom May 28, 2021

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I hereby affirm that I wrote this Master Thesis on my own and I did not use any other sources and aids than those stated.

Munich, 31. December 2021

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Signature

Abstract

Hier kommt der Abstract hin. Hier kommt der Abstract hin.

Contents

1. CAP

test

A. Beispiel Anhang

```
/*
* This code serves the initialization of an auxiliary probability array.
* The array holds at each position a pre-calculated probability for the index
* of that position. The probability reflects the Zipf-distribution for the
* corresponding indexes
*/
Set zipfExponent to 1.4
Set sum to 0
Set maxInteger to 65535
FOR i = 0 to maxInteger
probArray[i] = 1/pow(i + 1, zipfExponent)
Set sum = sum + probArray[i]
END FOR
FOR i = 0 to maxInteger
Set probArray[i] = probArray[i]/sum
END FOR
FOR i = 1 to maxInteger
Set probArray[i] = probArray[i] + probArray[i] = probArray[i-1]
END FOR

/*
* This code gets called in case a Zipf-distributed number is required. It
* iterates over the probability array until the chosen random number v
* is less than the value stored at the current array position i. The value of
* the array position will be returned as the calculated Zipf-distributed
* number
*/
Set v to a random number between 0 and 1
FOR i = 0 to maxInteger
IF v < probArray[i] THEN
RETURN i
END IF
END FOR
RETURN 0
```

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Bibliography