Adaptive Analysis of Optimal Prefix Free Codes

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A thesis
presented to the University of *Chile*
in fulfilment of the
thesis requirement for the degree of
Civil Engineer
in
Computer Science

Santiago de Chile, 2015

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

All the results exposed in this thesis correspond to joint work with J. Barbay.

Abstract

My work concerns bla bla bla...

Keywords

Main, Keywords, For, Indexing

Contents

Chapter 1

Motivation

A really well known problem in Computer Science, is the problem of computing Optimal Prefix Free Codes. This problem consist in finding an optimal codification for each element in an alphabet Σ.

This codification is optimal because is the objective to minimize the space used for each symbol according to a given parameter. So, for computing the codification of each symbol we need to know this parameter, wich we assume is given as a list of weights.

This problem has been widely studied across history and there are a lot of results respecting it. The most used and well known algorithm to computing Optimal Prefix Free Codes is the Huffman Algorith. In fact, Optimal Prefix Free Codes are widely called "Huffman Codes".

Chapter 2

Previous Work

Some 10 to 20 pages to show that the student knows the main results in the area.

Chapter 3

Analysis

Chapter 4

Objectives

Chapter 5

Methodology

Chapter 6

Advanced Work

Chapter 7

Chronogram