Literature Review - An Analysis of P vs N

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Chapter 1

Introduction

1.1 What is P vs NP problem

The P vs NP problem is a very famous problem in computer science. The problem can basically be described as following: if a computer is able to check the answer to a problem can that computer actually solve said problem?[1] P problems can be solved faster by computers than NP problems and are termed as "easy" problems, NP problems are "easy" for a computer to check but are not "easy" for a computer to solve.[1] If P != NP(!= means not equal) then problems in NP are harder to compute than to verify this means they could not be solved in polynomial time but could be checked in polynomial time.

1.2 What is polynomial time?

Polynomial time is a term that is applied to algorithms if the number of steps to complete said algorithm for a given input is $O(n^k)$ where k is any non-negative integer and where n is the algorithmic complexity of the input to the algorithm [2] Everyday calculations such as all basic arithmetic and calculating digits of π and e are said to be done in polynomial time by a computer[2].

1.3 Analysis of project

1.4 Outline of chapters

Chapter 2

Researching the problem

Chapter 3

Analysis of Papers

Bibliography

[1] Wikipedia(multiple), "P versus np." https://simple.wikipedia.org/wiki/P_versus_NP.

[2] D. Terr, "Polynomial time." http://mathworld.wolfram.com/PolynomialTime.html.