COURSE NAME
COURSE CODE

ASSIGNMENT NAME

Abdulsalam Aldahir

dv18aar@cs.umu.se

September 19, 2022

COURSE NAME
Someone , Someone , Someone

Contents

Abdulsalam Aldahir
dv18aar@cs.umu.se
September 19, 2022

Abstract

The development and widespread of Internet browsers and technologies make them a tool that can be used for many scientific problems. This raises the question of whether Internet browsers, together with WebGPU and WebRTC, can be used to do scalable computing in a distributed cluster. This thesis answers the question by implementing a peer-to-peer cluster and testing it with two problems, Matrix multiplication and Mandelbrot sets generation. The experimental results show that computing embarrassingly parallel problems are scalable with more than 75% efficiency.

1

Abdulsalam Aldahir
dv18aar@cs.umu.se

1 Introduction

2 Background

3 Method

$$max_{j \in [0..n]} \left\{ maxJ(j) \right. \tag{1}$$

$$maxJ(j) = max \begin{cases} CC(j) + RR(n-j) \\ DD(j) + SS(n-j) - G_{open} \end{cases} \tag{2}$$

4 Results

Figure 1: The Speed up results of the algorithm[**?**]

5 Discussion