Final Project
INF236: Parallel Programming
Parallel Matrix Multiplication

Kateřina Čížková, Luca Klingenberg

May 9, 2021

Figure 1: Stonks

1 Introduction

2 Algorithms

In this section all the implemented algorithms are explained in further detail.

2.1 Matrix Multiplication

2.2 Strassen Algorithm

$$\begin{pmatrix} A_{11} & A_{12} \\ A_{21} & A_{22} \end{pmatrix} \cdot \begin{pmatrix} B_{11} & B_{12} \\ B_{21} & B_{22} \end{pmatrix} = \begin{pmatrix} A_{00}B_{00} + A_{01}B_{10} & A_{00}B_{01} + A_{01}B_{11} \\ A_{10}B_{00} + A_{11}B_{10} & A_{10}B_{01} + A_{01}B_{11} \end{pmatrix}$$