## Current Topics in Multimedia Communication: Server, Cluster, and Cloud Computing-Project

1

Giovanni Liva

May 7, 2016

#### Introduction

I create code in C and C++ because i discover after create YSMF that pthread and C++ classes don't works pretty well together

My specs are: Procio: 2,5 GHz Intel Core i7-4870HQ num Cores: 8 num Threads: 8 RAM:  $16\mathrm{GB}$ 

Code in C/C++ How to compile

## Implementation

C++ class for YSMF pthread to implement threads three different strategies motivation why three

#### **Evaluation**

Run ./evaluation.sh to generate .csv files. Then process them with R to generate the following graphs.

all single blabla

### Single Thread

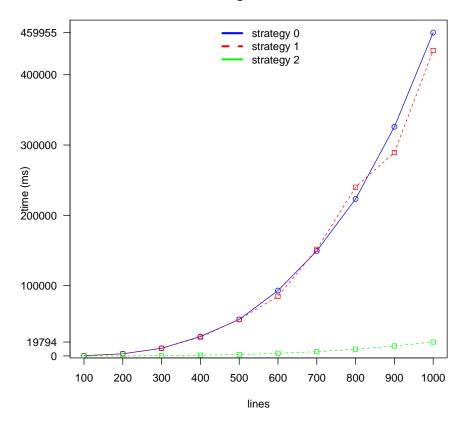


Figure 1: RAM Used to compute a matrix  $100000 \times 1000000$ 

all\_multiple bla bla bla

# 

Figure 2: RAM Used to compute a matrix  $100000\times1000000$ 

Threads

60

66 72 78

 $\mathbf{diff\_time\_multiple}$ 

 $init\_phase$ 

 $\mathbf{speedup}$ 

Blow the Memory UP  $100000 \times 1000000$ 

12 18

24

30 36

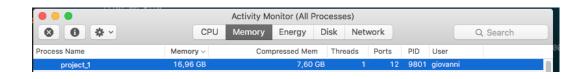


Figure 3: RAM Used to compute a matrix  $100000 \times 1000000$