

















Estabilização de vídeo

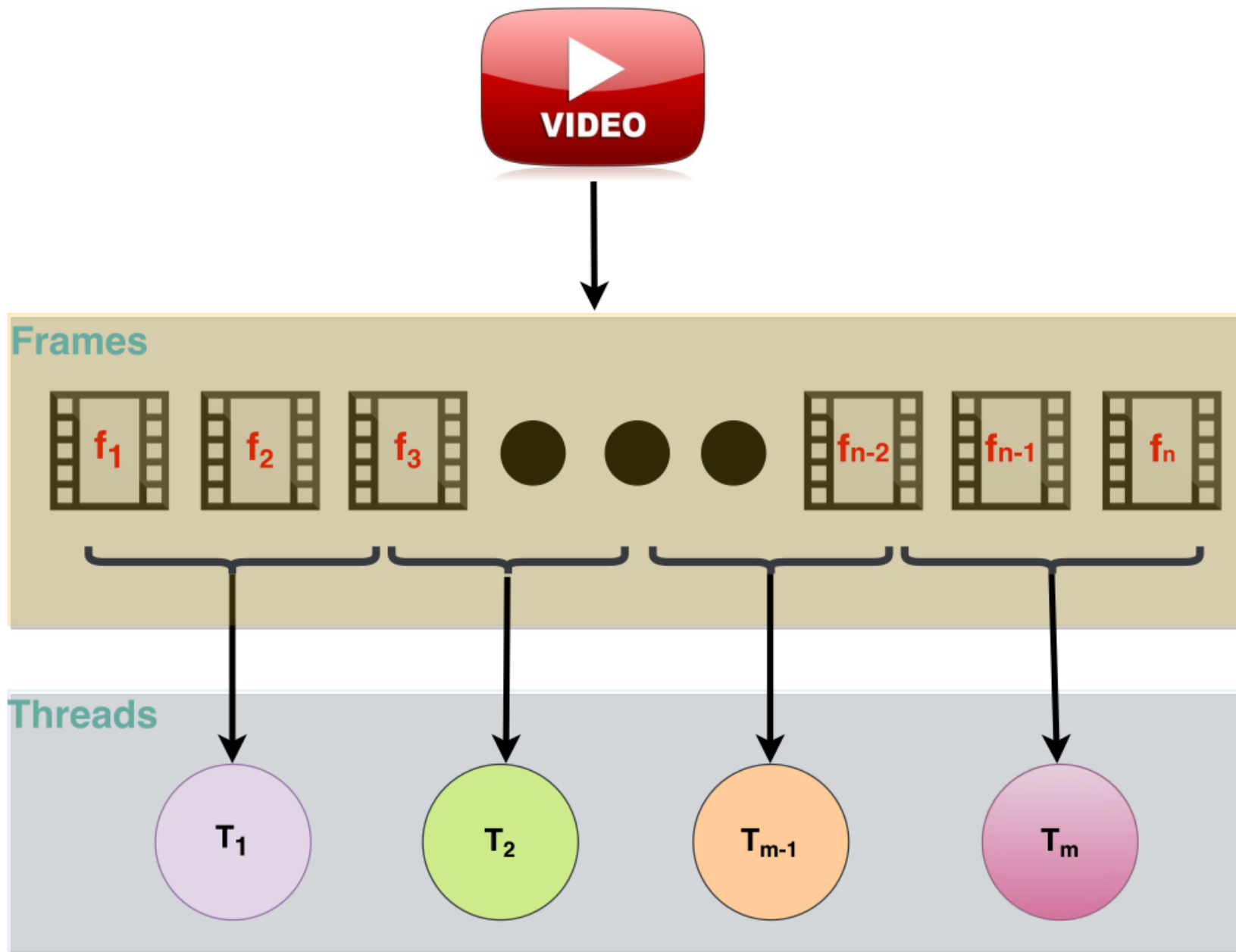
Leandro Souza da Silva

29 de Junho de 2017

Perfilamento

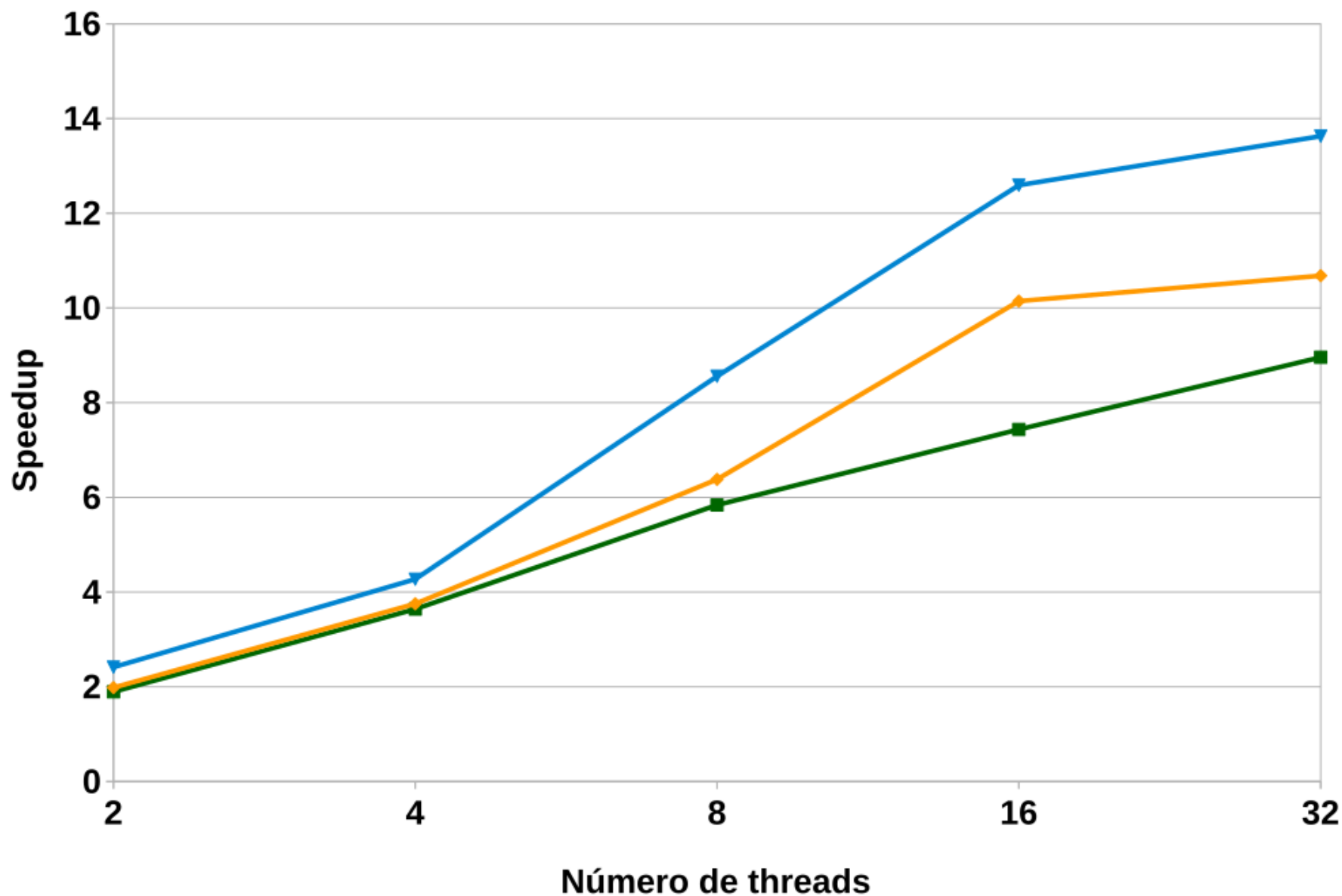
 Basic Hotspots Hotspots by CPU Usage viewpoint (change) 				
 Collection Log  Analysis Target  Analysis Type  Summary  Bottom-up  Caller/Callee  Top-down Tree				
Function	CPU Time: Total 			
	Effective Time by Utilization 		Spin Time	Overhead Time
	 Idle  Poor  Ok  Ideal  Over			
_start	89.5%	<div></div>	1.1%	0.0%
__libc_start_main	89.5%	<div></div>	1.1%	0.0%
[stack]	89.5%	<div></div>	1.1%	0.0%
main	89.4%	<div></div>	1.1%	0.0%
transformationFrame	81.6%	<div></div>	0.0%	0.0%
cv::goodFeaturesToTrack	57.9%	<div></div>	0.0%	0.0%
cv::calcOpticalFlowPyrLK	19.5%	<div></div>	0.0%	0.0%
__clone	9.3%	<div></div>	0.0%	0.0%
func@0x4fc740	9.3%	<div></div>	0.0%	0.0%
start_thread	9.3%	<div></div>	0.0%	0.0%
func@0x24f058	9.1%	<div></div>	0.0%	0.0%
func@0x29db40	8.7%	<div></div>	0.0%	0.0%
func@0x2a2730	8.7%	<div></div>	0.0%	0.0%
readFrames	4.1%	<div></div>	1.1%	0.0%
cv::VideoCapture::operator>>	3.9%	<div></div>	1.1%	0.0%
[Unknown stack frame(s)]	4.2%	<div></div>	0.0%	0.0%
cv::cvtColor	3.7%	<div></div>	0.0%	0.0%

Arquitetura Paralela

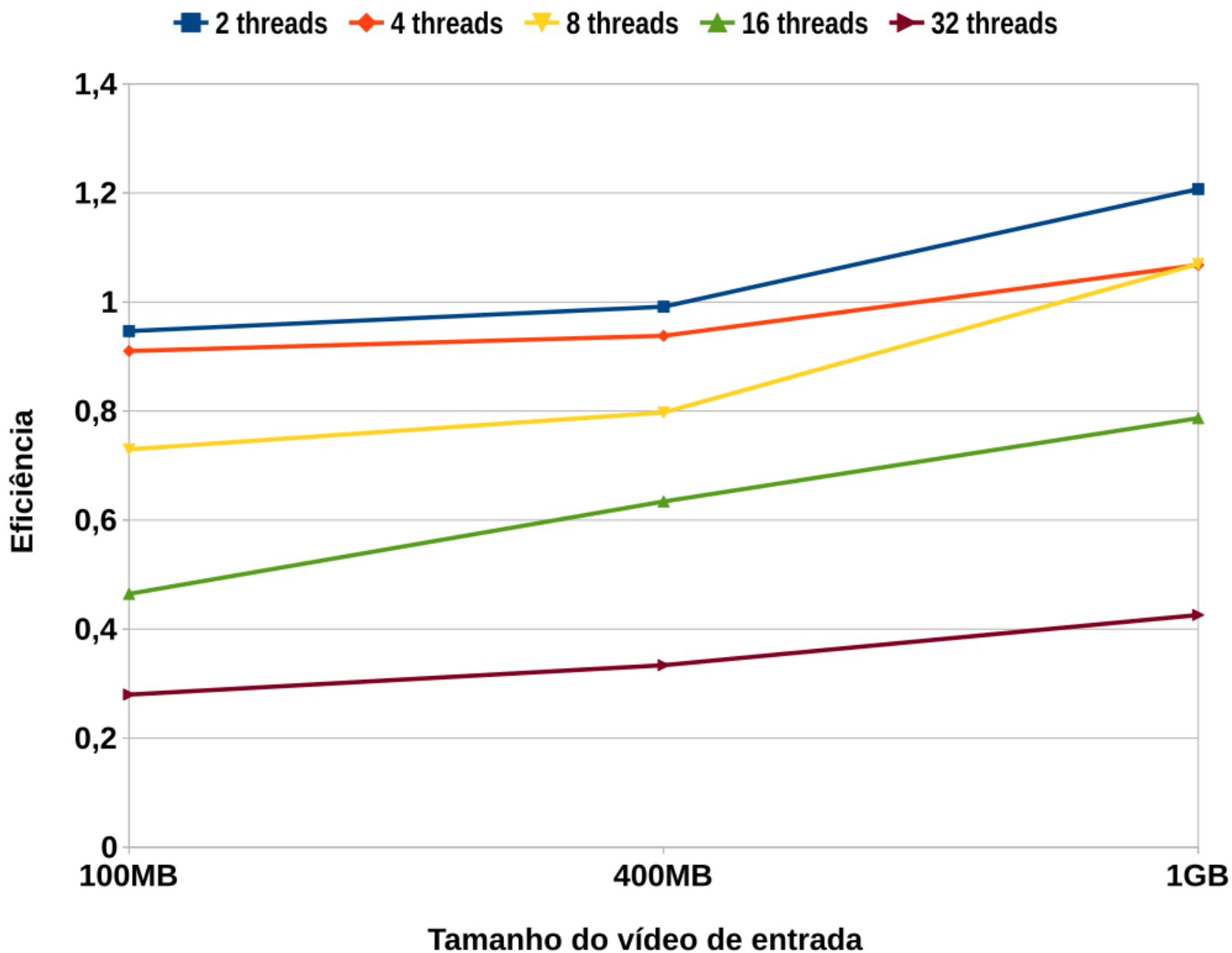


Speedup e Eficiência Pthread

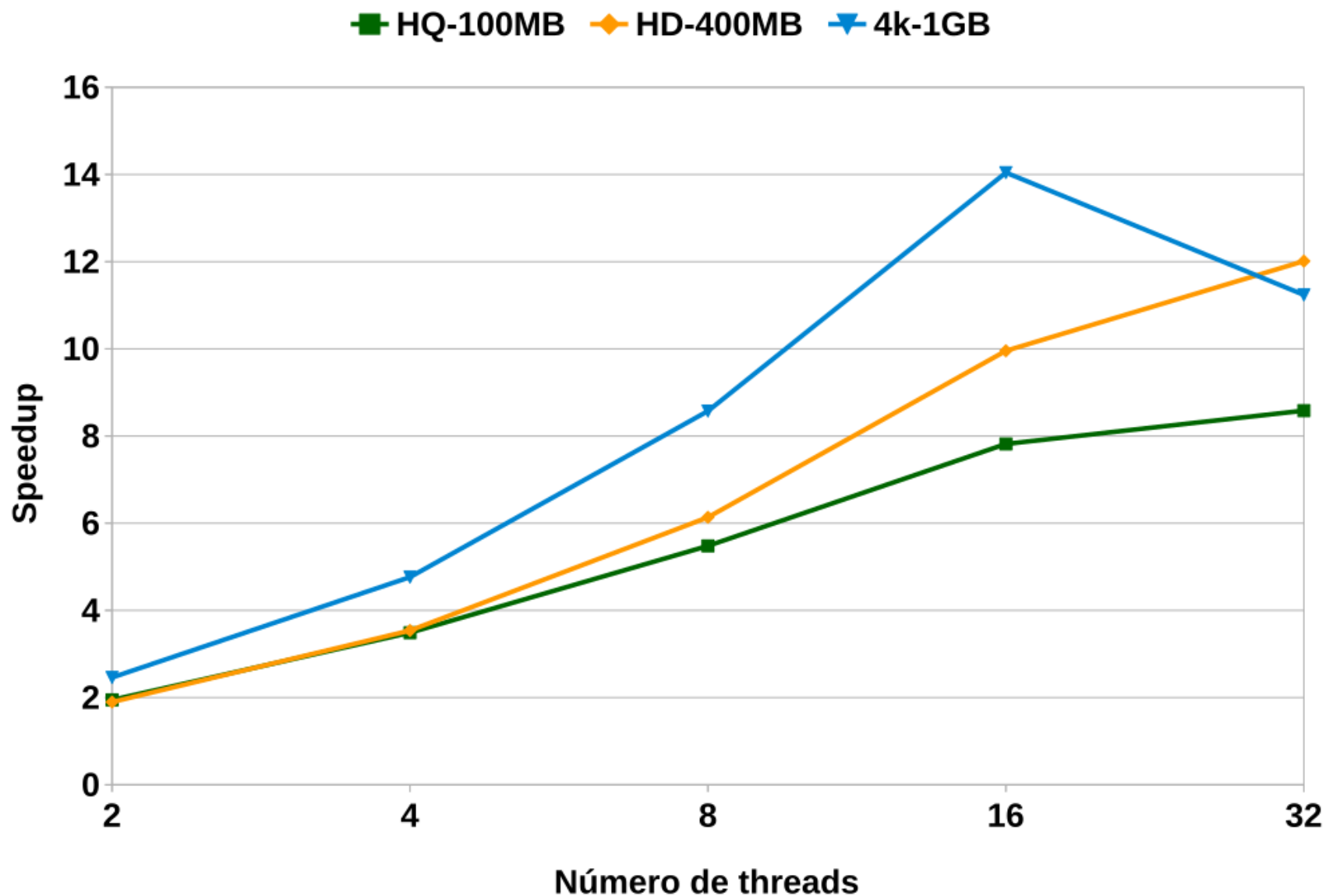
■ HQ-100MB ◆ HD-400MB ▼ 4k-1GB



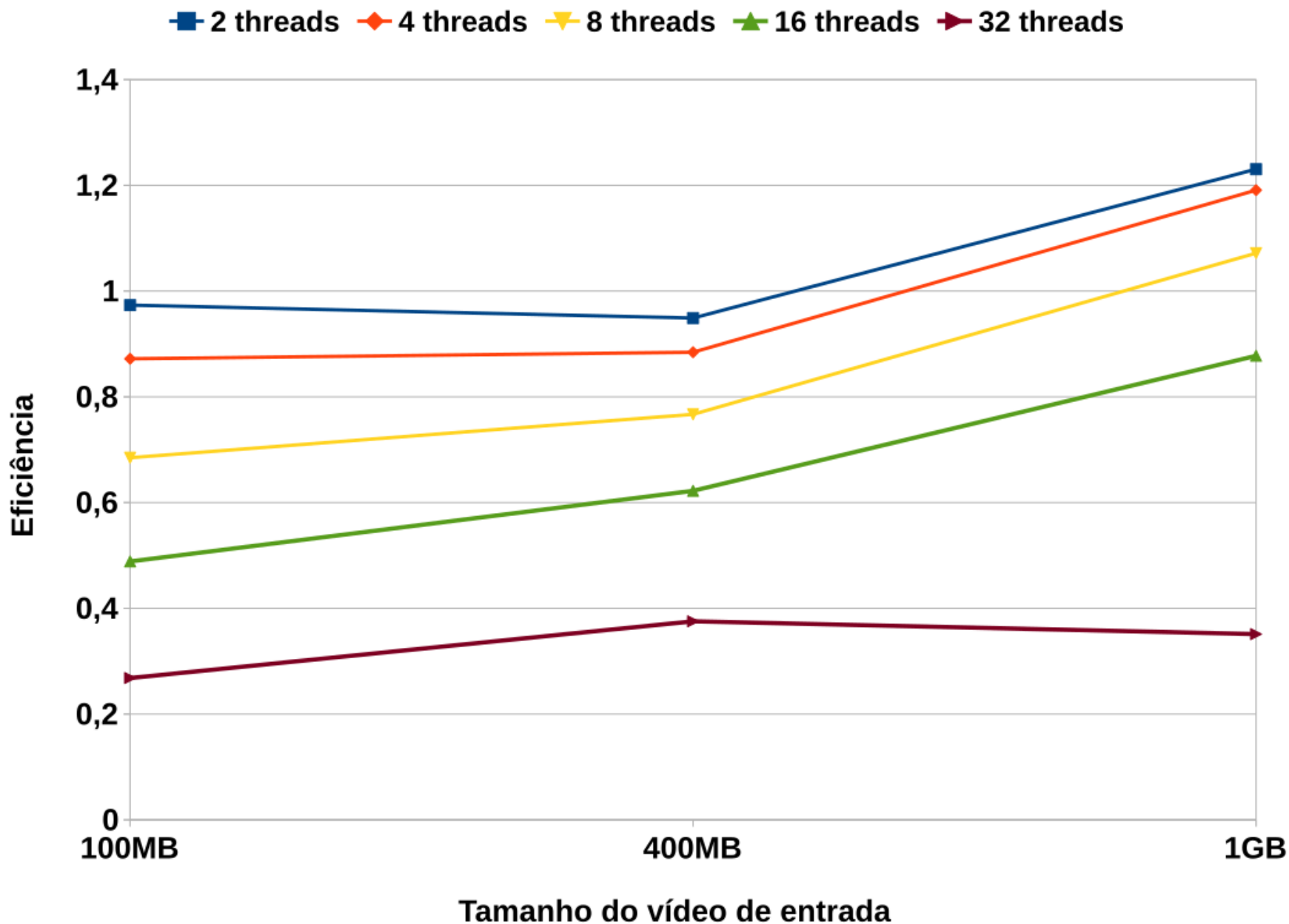
Speedup e Eficiência Pthread



Speedup e Eficiência OpenMP

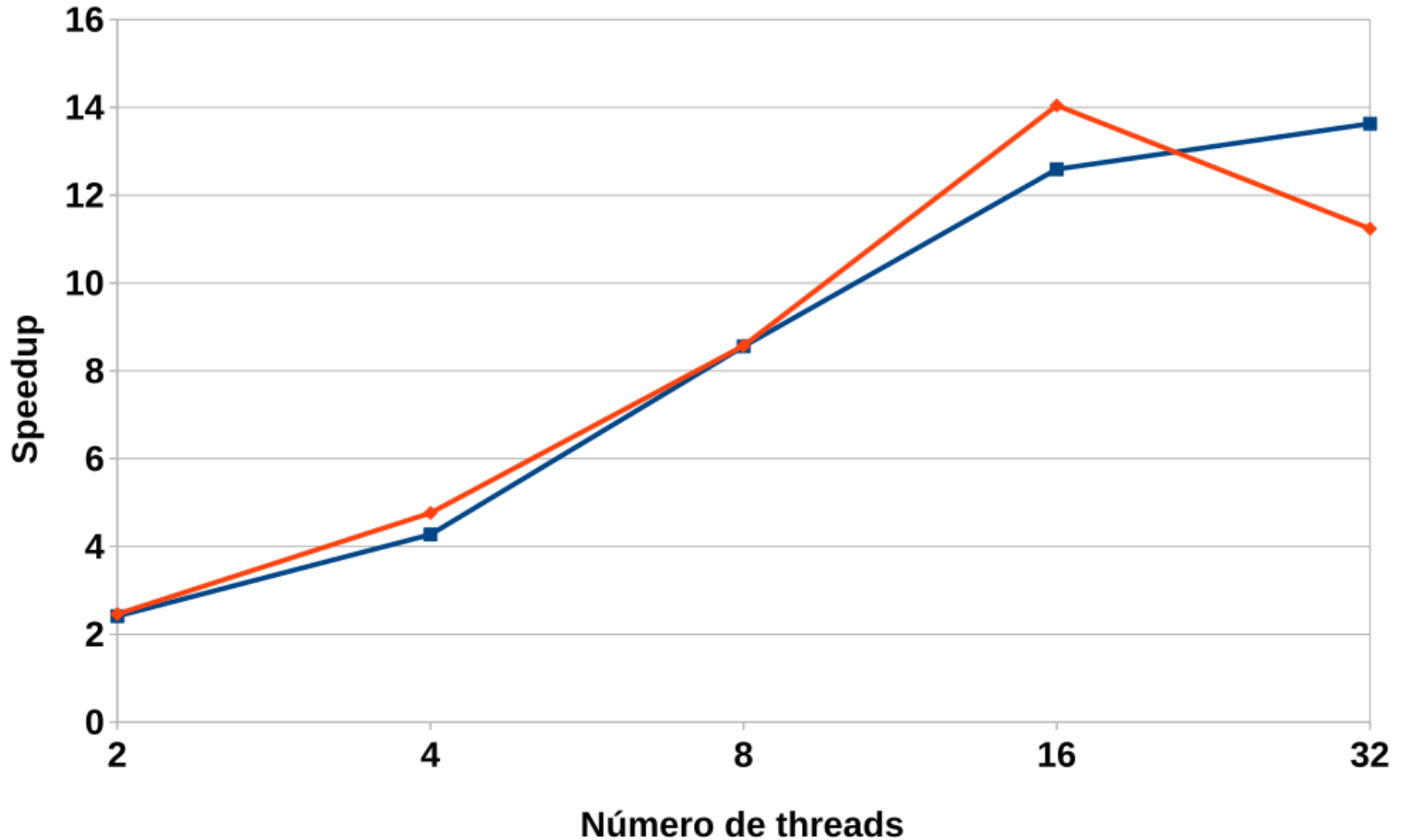


Speedup e Eficiência OpenMP



Speedup, Pthread vs OpenMP

■ Pthread 4k-1GB ◆ OpenMP 4k-1GB



Dificuldades

As principais dificuldades encontradas foram:

- **Construção de um conjunto de dados adequado.**
- **Gasto de tempo elevado para realizar os testes.**
- **Diferenças entre as arquiteturas cuda e OpenCV.**