

Introduction to MAQAO

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What is MAQAO ?

It is a set of tools which use CPU emulation.

Maqao documentation (<http://www.maqao.org/>)



- ▶ **Debugging** informations :
 - ▶ To check the allocation/deallocation
 - ▶ To check the memory read/write
- ▶ **Profiling** informations :
 - ▶ To evaluate the time spent in each function of a program
 - ▶ To find the hot spots in a program
 - ▶ Branch-prediction
 - ▶ Heap usage

Aim of this tutorial

- ▶ How to evaluate a program with **maqao's cqa** tool ?
 - ▶ **cqa** : **C**ode **Q**uality **A**nalysers
 - ▶ **C**heck compiler work
 - ▶ **S**tatic binary analysis (without code execution)
 - ▶ **U**nderstanding/**U**sing report of binary analysis
 - ▶ **H**ints/**T**ricks to improve performances
- ▶ On a **Hadamard** product
- ▶ **C**ross-**C**heck with performance evaluation tests

