

CS 594004 – Homework # 7  
(due April 2<sup>nd</sup>, 2008)

Submit homework by sending an archive of your submission to [karl@cs.utk.edu](mailto:karl@cs.utk.edu)

1. Using KOJAK

Download KOJAK <http://icl.cs.utk.edu/projectsfiles/kojak/software/kojak/kojak-2.2.tar.gz>. Consult the file INSTALL and install the required packages before installing KOJAK.

- Install wxWidgets <http://www.wxwidgets.org>
- Install libxml2 <http://www.xmlsoft.org>
- The following commands should be in your search path
  - xml2-config
  - gtk-config
  - wx-config
  - If you only have xml2-config, then the CUBE GUI will not be built

Use KOJAK on your MPI program from Homework #3, make a screenshot of the CUBE GUI showing the profile of your application

Send the screenshot and discuss the results of your performance study with KOJAK. What does KOJAK tell you about where your program spends its time (callpaths/Nodes, threads). What performance problems could be identified by KOJAK.

2. Using TAU

- Download PDT from <http://www.cs.uoregon.edu/research/pdt/home.php> and install it
- Download TAU from <http://www.cs.uoregon.edu/research/tau/home.php> and install it, pointing to the PDT installation above
- Configure TAU to do callpath profiling (**-CALLPATH Configuration Option**).
- USE TAU to collect profiles from your MPI program from Homework #3, use Paraprof to visualize them.
- Make a screenshot of the Paraprof GUI for your application's profile
- Discuss the results that Paraprof give you
- Discuss the differences between KOJAK and TAU, which one gives you more /better information about your program, which one is easier to use?

If you have problems installing the tools, please send email to [karl@cs.utk.edu](mailto:karl@cs.utk.edu).