

Target Applications

In addition to using standard benchmark programs, the Habanero team is engaging with experts in different application domains to validate the results of our research. The current list of application programs being used by Habanero team members is included below. Additional suggestions are always welcome:

1) Standard Benchmarks

- [SSCA's #1, #2, #3](#) from DARPA HPCS program
- [NAS Parallel benchmarks](#)
- [Java Grande Forum benchmarks](#)
- [SPECjvm98](#) and [SPECjbb2005](#) benchmarks
- [DaCapo](#) benchmarks
- [PARSEC](#) benchmarks
- [Shootout](#) benchmarks

2) Medical Imaging applications

- New algorithms and applications being developed at the [Center for Domain-Specific Computing \(CDSC\)](#)
- Back-end processing for [Compressive Sensing](#)

3) Seismic Data Processing

- [Rice Inversion project](#)
- [DIPOLE1D](#) application

4) Computer Graphics and Visualization

- [Subdivision](#) and other methods for mathematical modeling and smoothing of meshes

5) Habanero Compiler

- Implement Habanero compiler in Habanero so as to exploit multicore parallelism within the compiler

