

2009 Highlights

Research team

At the end of 2009 the center research team consisted of six senior researchers (2 at AU), four Post Docs (3 at AU) and eighteen PhD students (12 at AU). Additionally, three further Post Docs and 3 PhD students (who obtained degrees during the year) were part of the center in 2009. All center Post Docs are internationals and so are a good deal of the PhD students.



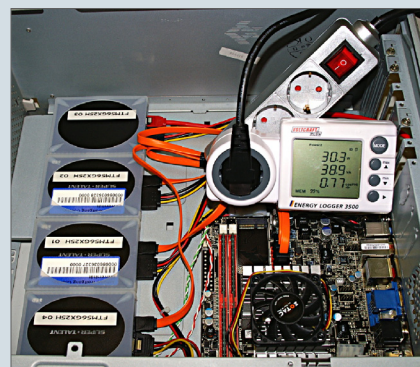
Research collaboration and results

In 2009 MADALGO researchers published 60 peer reviewed research paper within the center research areas. Several of these papers have appeared in highly ranked journals and conference proceedings. Some of the results in the papers have been obtained with the many international researchers that have visited MADALGO in 2009.

The center also has extensive multidisciplinary and industry collaboration, e.g. on issues in connection with massive terrain data. In fact, in 2009 Aarhus University and several MADALGO researchers established the company SCALGO to commercialize software for efficient massive terrain data processing.

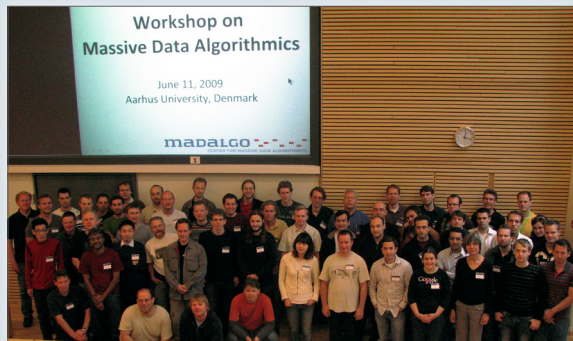
MADALGO researchers consider algorithms in many different theoretical models designed to capture different aspects of real computer hardware.

For obvious reasons, energy efficient computing is attracting increasing attention. By combining and engineering algorithm techniques from several theoretical models, MADALGO researchers recently obtained a world record in the area of energy efficient computing: Sorting 1 Terabyte of data with minimal energy use.



Center events

In 2009 MADALGO organized the 25th Annual ACM Symposium on Computational Geometry, which is the top international conference in the area. The day before the symposium MADALGO organized a celebration of the 25th anniversary of the symposium with lectures by four distinguished invited speakers.



The day after the symposium MADALGO organized the First Workshop on Massive Data Algorithmics. The workshop was a success and the goal is to eventually make it a full-fledged annual conference.

In 2009 center researchers also gave more than 20 presentations at international research conferences, participated in more than 15 invitation only international research workshops, and gave more than 25 invited presentations at research workshops and University seminars.

Awards and acknowledgments

The senior center researchers received a number of awards and acknowledgments in 2009. Arge was named a Distinguished Scientist by the Association of Computing Machinery (ACM) and appointed Associate Editor of the ACM Journal of Experimental Algorithmics. Demaine was named the Mathematical Association of America's George Polya Lecturer, and Brodal was promoted to Associate professor with exceptional qualifications ("Lektor MSK").