

2007 Highlights

Research team

Center for Massive Data Algorithmics (MADALGO – see www.madalgo.au.dk) was established on March 1, 2007. At the end of 2007 the center research team consisted of 6 senior researchers (2 at AU), 4 post docs (2 at AU) and 13 PhD students (6 at AU). Additionally, one further Post Doc and two PhD students (who obtained their degrees in July) were part of the center in 2007. All center Post Docs are internationals and so is a good deal of the PhD students.

Research collaboration and results

Although a buildup year, MADALGO researchers have published 21 peer reviewed research papers within the center research areas in 2007. 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 2007. The center has also had extensive multidisciplinary and industry collaboration, mainly on issues in connection with massive terrain data.

Modern airborne laser scanning technology is capable of acquiring very accurate terrain data at meter resolution. Such a scan of Denmark can easily occupy over a TeraByte (1000 Gigabytes).

One 2007 center paper describes the TerraSTREAM software package developed at MADALGO, which can e.g. be used to model water flow (and flooding) on truly massive terrain datasets.



Center events and publicity

Apart from a large number of smaller research seminars and workshops, as well as a retreat for center employees, MADALGO hosted two major events in 2007, namely an international summer school and an inauguration event. The center has also received quite a lot of media attention, appearing in more than 20 newspaper/magazine articles and radio/tv features (see www.madalgo.au.dk).



On Friday August 24 the inauguration of MADALGO was celebrated. The inauguration event included half-hour scientific talks by highly recognized international researchers in the core center research areas.

Just preceding the inauguration the center hosted a four day international Summer School on Data Stream Algorithms, where 5 leading international experts lectured for 70 participants (mainly PhD students) representing 21 nationalities.



Awards and acknowledgments

The senior center researchers have received a number of awards and acknowledgments in 2007. Demaine and Indyk received tenure at Massachusetts Institute of Technology and Meyer accepted a Chair (full professor position) in Algorithm engineering at Frankfurt University. Furthermore, Demaine received a honorary degree from Dalhousie University and Arge was elected chair of the steering committee for the European Symposium on Algorithms.