

# Travel Report from RTCSA'06

Jerker Bengtsson  
Centre for Research on Embedded Systems  
Halmstad University  
PO Box 823, SE-301 18 Halmstad, Sweden  
Jerker.Bengtsson@ide.hh.se

The 12th IEEE conference on Embedded Real-Time Computing Systems and Applications was held 16th to 18th of August. The location was at the 4 points Sheraton Hotel at Darlington Harbour in Sydney, Australia. The RTCSA conference is one of the main conferences on practical oriented and applied real-time computing. I had no paper myself submitted to this conference. My work had so far been mostly focused on parallel programming and compilation for multicore processors. Therefore I found this conference to be an interesting opportunity to get an updated view of possible related real-time work and, new ideas to bring into the work.

I expected the topics on this conference to be somewhat collected but the sessions were quite wide spanning; everything between "power aware computing", "ubiquitous computing" to "scheduling and timing analysis". I was more interested in the latter topic. In my opinion, the scope of sessions was a bit too wide for this conference. A pity is that the discussion related to the papers in some cases became more or less absent.

Despite the far conference location, there were quite a few papers with authors and representatives from Sweden; Halmstad, Mälardalen and Linköping. One of the observations that I made during the presentations is that there in general seem to be a more close connection in these works (from Sweden and other European representatives), between academia and industry.

A growing application trend in the real-time research community is wireless sensor networks. I was a bit surprised that there were not so many papers directly related to this topic. I also observed that there was not so much work related to multicore processors. It is a bit notable since such emerging processor architectures are motivated mainly by real-time applications of some kind.

The best paper award was selected to be "Rate Monotonic Schedulability Conditions Using Relative Period Ratios". This paper presents work which improves the quite pessimistic Liu and Layland schedulability bound, by taking relative task periods into account.

In conjunction with the conference there was a banquet dinner and a guided boat trip. The boat trip originated in Darlington Harbour and took us out on a tour in- and outside the harbour of Sydney. We were lucky with the weather



Figure 1: Report author outside the opera house in Sydney. The roof tiles are Swedish-made ceramic, from Höganäs, Sweden

and it was nice to see Sydney from the seaside. The highlight on the banquet was the live didgeridoo concert, performed by two aboriginals.

To summarize, although it was a long and quite tiresome trip it was a successful trip - many interesting people and a nice location.