

Travel report from ISCA 2001

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The 28th annual International Symposium on Computer Architecture (ISCA) was held in Gothenburg. I attended the conference supported with a travel grant from ARTES mobility. ISCA is considered the most prestigious conference in the computer architecture field and the conference contained a wide variety of interesting papers. I found the overall quality of the papers very high. I especially enjoyed the keynote speech by Greg Papadopoulos, CTO of Sun Microsystems, where he presented his view on the future of storage. I also appreciated a paper on speculative execution as a method of prefetching presented by Craig Zilles from the University of Wisconsin. The paper closest to my own area of research was "Locality versus Criticality" by Srinivasan et al, which explores selective caching based on criticality i.e. a load is classified as critical if a cache miss will cause the processor to stall.

This time was the second time the conference was held in Sweden, which is quite impressive considering that no other country except the US has hosted the conference more than once. General chair for the conference was Per Stenström, coordinator for the ARTES PAMP initiative. In conjunction with the ISCA conference was the Workshop on Memory Performance Issues (WMPI). At the workshop I presented my work on selective cache allocation, which has been done with support from Ericsson UAB. My presentation generated a lot of interesting discussion and I received valuable feedback on my work. The proceedings of the workshop are currently being put together into a book and will be published by Springer-Verlag. I was staying at the conference hotel and my next-door neighbour was Maurice Wilkes one of the computer architecture pioneers and a legend in the field. Dr Wilkes among other things published the first paper on cache memories, which is my own area of specialization. My overall experience from visiting the conference and workshop was great and I wish to revisit the conference again in the future.

/Martin