Chair for Integrated Systems
TUM Department of Electrical and Computer Engineering
Technical University of Munich

Seminar

A comparison of Global Memory and DistributedMemory Architectures

The rise of Multicore processors in the recent decade induced also the necessity appropriate Memory Models. Especially with the ever-growing number of corses, it is not distinct by default whether a global memory hierarchy or a distributed memory structure is more beneficial. While former can potentially become a bottleneck if too many cores access it simultaneously, latter arises new challenges of data-to-task locality and a prescient data placement.

This seminarr topic is about a comparative analysis of both approaches. This includes amongst others their benefits and drawbacks, their suitable application fields and typical system architectures.

The task during the seminar consists of an exhausitve literature study on that topic in order to describe, analyze and compare the most important approaches. Individual adjustments of the the seminar topic according to the student's preferences is possible.

Prerequisites

B.Sc. in Electrical Engineering, Computer Science or a similar topic

Contact

Oliver Lenke

o.lenke@tum.de

Advisors

Oliver Lenke