

Industry Collaboration and the Parallelism Crisis

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(in about 10 minutes)

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- With some emphasis on what's different now

What's different now?

- Requires a wider/broader discussion than previously
 - Programming models
 - Programming languages
 - Programmer productivity
 - Applications
- Critical business models at risk

What does industry have to contribute

- Direction and input into critical problems
 - Architecture
 - Emerging programming models
 - Emerging languages
 - Emerging applications
 - Software productivity issues
 - Data center key issues
 - ...
- Technology Transfer
- Access
 - to data, traces, real datacenters
- Funding
 - Many companies' futures rides heavily on solving this problem

Collaboration/discussion needs to be broad

- Needs to involve more than 3 schools
 - => should consider a forum that provides the type of interaction the UPCRC's have, but with a broader audience
- Perhaps organized/funded tours
 - A few industry people traveling together to several schools to discuss key parallelism/programming model/??? Issues
 - Could be key to furthering the educational mission (educating our colleagues about the death of serial execution).
 - A few academics going to several industry sites to educate about upcoming architectural challenges