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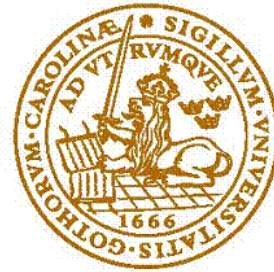
What is MAPCI?

Björn Landfeldt



MAPCI





LUND
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SONY



MAPCI



The Institute

“Laying the foundation for a truly connected world through world-class research, disruptive innovation, and industry collaboration”



Main Roles

- Research
- Innovation



Roles

- Research
 - Medium to long-term general questions
 - Short-term industry driven projects
 - Clear targets (how do we optimise?)
- Innovation

Roles

- Research
- Innovation
 - Commercialise outcomes
 - Partners
 - Start-ups / licensing
 - knowledge transfer
 - open innovation environment



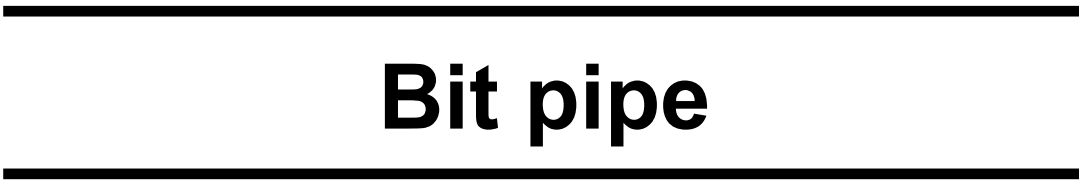
So where does MAPCI slot in?

System BIG Picture

Client-Server Computing paradigm



Client side application component



Server side application component



Client-Server Computing paradigm

Something BIG is happening!

Internet of Things

Mobile Cloud Computing

Client side
application
component

Bit pipe

Server side
application
component

User devices



Limiting factors



Wireless connectivity
Battery operation
CPU
Memory
I/O
...



Shifting paradigm



It gets worse, Internet of things



The systems model has changed completely

- Client applications can no longer manage the system
 - Severely increased complexity
- The network is now a distributed computing system (connectivity, processing, storage)

- Big Issues with:
 - Wireless
 - Energy
 - systems control
 - etc.



MAPCI

- MAPCIs role is to work towards the realisation of these systems through research and innovation
- Ambition, build large-scale interdisciplinary research efforts from silicon to app
- Draw from existing pool of excellence at LTH and industry
 - Hardware
 - Software
 - Systems and control
 - Algorithms
 - ...



MAPCI

- Will be a hub for research in mobile systems
- Provides physical location for projects
- Promotes interdisciplinary exchange of ideas and collaboration



MAPCI projects

- Can be fully externally funded projects hosted by MAPCI
- Can be partially funded by MAPCI
 - Seed funding
- Budget is fairly limited at the moment
- Focus on external funding academic - industry collaborations.



Oh, and we have the best research coffee in town!

