

# SYCYPHOS - A Framework for Designing Cyber Physical Systems

Florian Schupfer, Josef Wenninger, Christoph Grimm  
Vienna University of Technology, Institute of Computer Technology

Combining distributed computer ('cyber') and physical systems leads to new challenges that are not yet solved, neither by tools nor by methodologies. The methodology handles design issues and provides a (work in progress) tool for the design of cyber physical systems. The tool supports modeling of distributed and heterogeneous systems -- in particular at functional level -- while offering means for power estimation and for analyzing the impact of non-ideal behavior of micro- or nanoelectronic implementations.

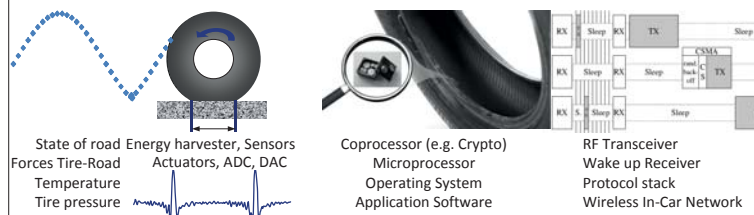
PROBLEM

- No joint simulation of network and Hardware/Software design
- Late verification of properties like current consumption, accuracy or reliability

SYCYPHOS

- Common modeling of network and HW/SW components
- Profiling of accuracy/robustness and power consumption at CPS level

## Example of a Cyber Physical System

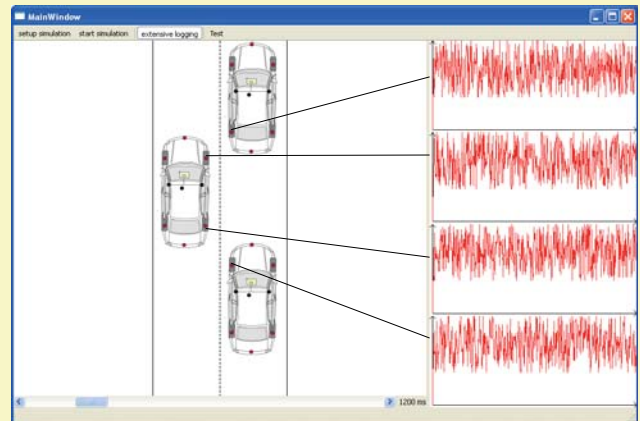
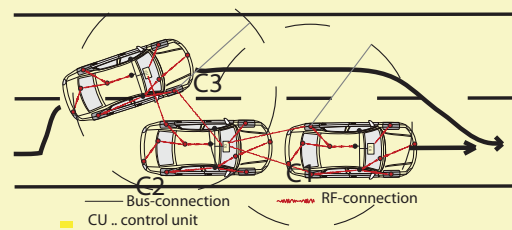


## SYCYPHOS - Features

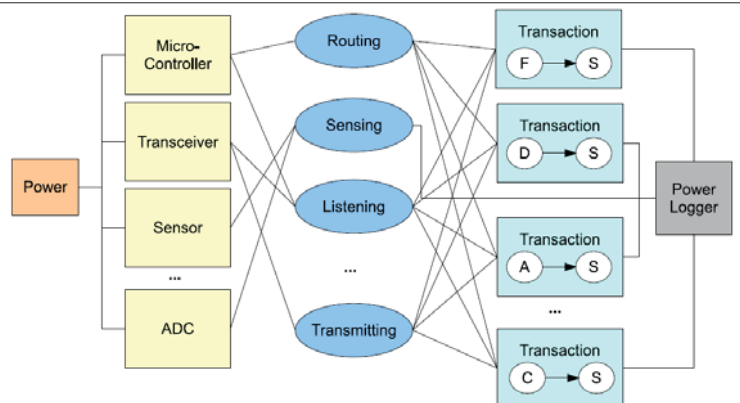
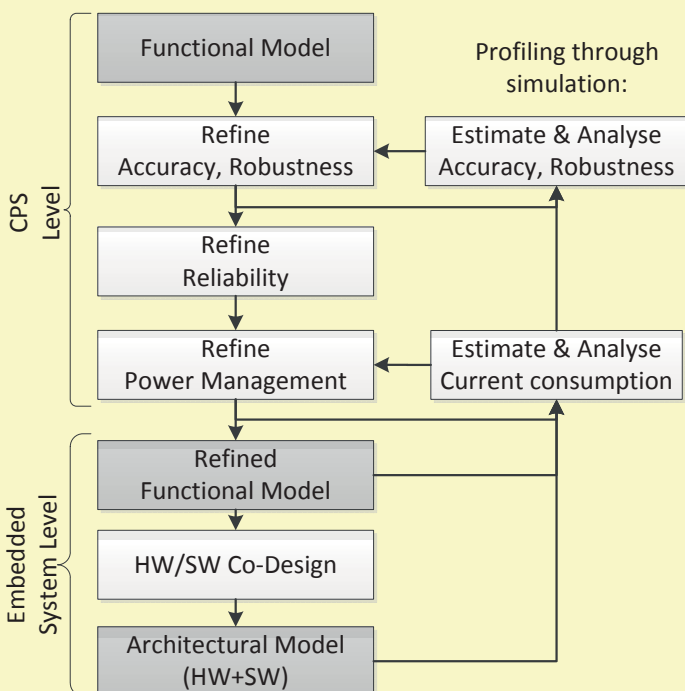
Profiling of:

- Power properties
- Accuracy metrics
- Reliability estimation

## Power Profiling



## Design Methodology



Contact: Prof. Christoph Grimm, Vienna University of Technology  
Institute of Computer Technology: [grimm@ict.tuwien.ac.at](mailto:grimm@ict.tuwien.ac.at)

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