



# Praktikum SS2013: Hardware/Software Co-Design with a LEGO car

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#### Goal

Hands-on embedded systems design

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- $\circ$  Embedded software
- $\circ$  Embedded hardware
- $\circ$  System integration

4/3/2013

Fun!





## **Objectives**

- LEGO Car Train
  - $\odot$  One equipped with Kinect
  - $\odot$  One with Accelerometer,
  - $\circ$  One with Camera,
  - $\circ$  One with Gyroscope
  - One with Ultra-sound
  - Your ideas !

#### May need:

Customized IP

4/3/2013

- Self-built PCB board
- $\odot$  Drivers for ALTERA NIOS II core

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### Organization

- Group work
- Three to four people per group
- One car per group

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- Each car is part of the train with different functionality
- Maybe a co-demonstration in the end of the semester

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