

ECHORD call1 experiment

BABIR

**A Better Audition
for a Better Interaction
with Humanoid Robots**

6th of April 2011

EURON/EUROP Workshop

Vasteras, Sweden

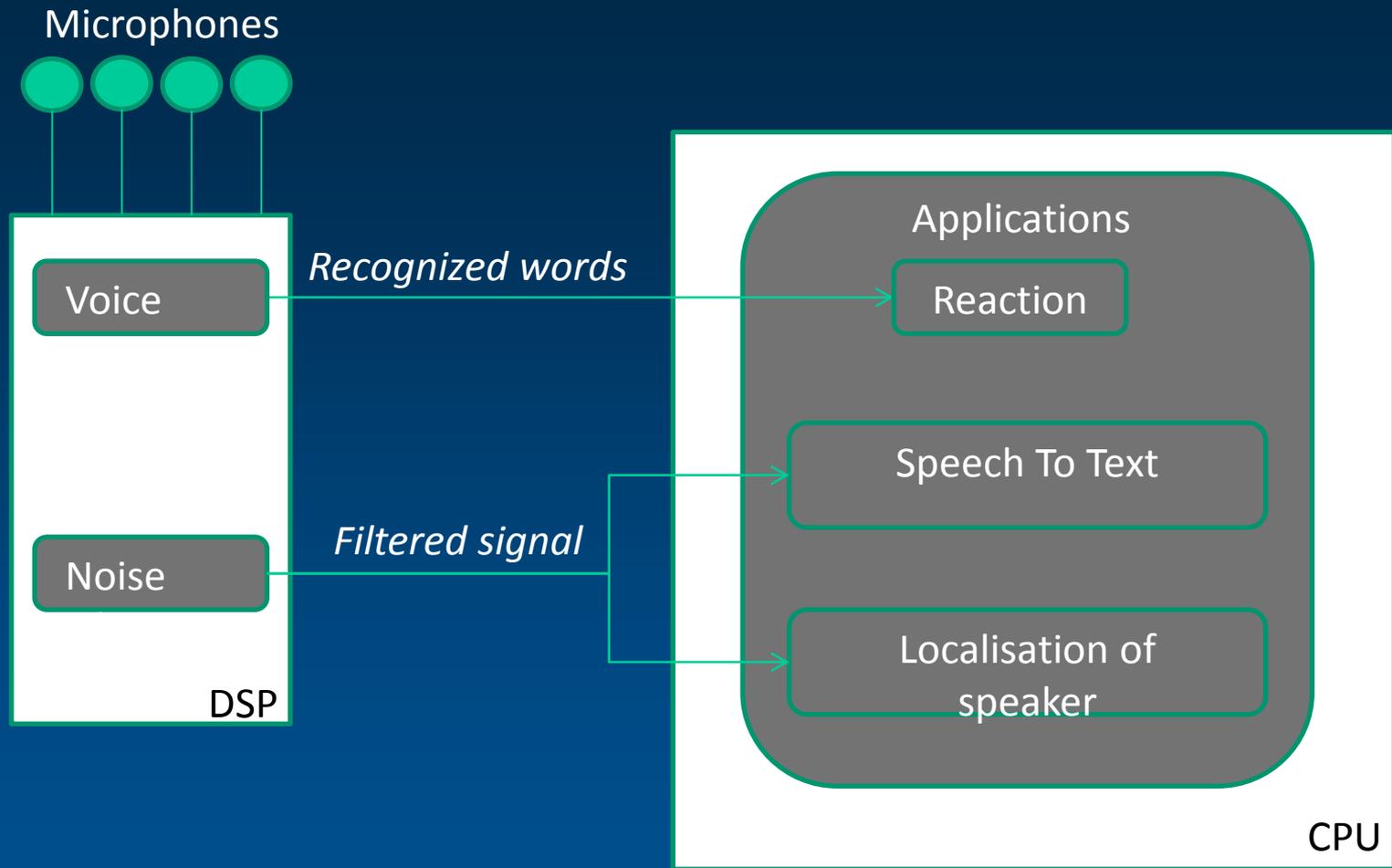
European Clearing House
for Open Robotics Development
www.echord.info



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- Man and Robot will live together
 - ❖ At work
 - ❖ At home
- Oral communication is the most intuitive
- Strong need for robust speech recognition
- Developments
 - ❖ High quality filtering of audio signal
 - ❖ Robust low level speech recognition
 - ❖ Accurate localization of the speaker

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- Timing

- ❖ Signal processing: T0+12
- ❖ Integration on DSP : T0+13
- ❖ Localization of the speaker : T0+12
- ❖ Integration : T0+16
- ❖ Results of evaluation : T0+18

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- Aldebaran Robotics
 - ❖ French SME
 - ❖ Humanoid Robot manufacturer
 - ❖ Development
 - ✓ Hardware integration
 - ✓ Speaker localization
- Vocally
 - ❖ French SME
 - ❖ Innovative solutions for digital voice processing
 - ❖ Development
 - ✓ Signal processing
 - ✓ Implementation on DSP