Learning perception, cognition and action in autonomous robots (IP)

- understanding by building
- study system-level neuroscientific models in autonomous robots (mainly existing platforms)
- focus on learning
- bring together researchers from computational neuroscience and robotics

jarmo.hurri(at)cs.helsinki.fi
Topics and groups

• integrated aspects: motor, sensory, attention, reinforcement learning

• expressions of interest: Dr Valpola (coordinator, HUT), Prof. Obermayer (TUB), Prof. Sandini (UG), Prof. Deco (UPF), Prof. Pfeifer (UZ), Dr Hyvärinen (UH)

• partners needed: motor learning, reinforcement learning

• http://www.lce.hut.fi/~harri/bio-i3/

jarmo.hurri(at)cs.helsinki.fi
Neuroinformatics group, University of Helsinki

• 3 PhDs, 4 grad students, leader Aapo Hyvärinen
• specialized in adaptive computational models of vision
• statistical models of natural images and video
• focus on hidden variable models (e.g., independent component analysis)

jarmo.hurri(at)cs.helsinki.fi
Our interest in Bio-i3

- combining models of vision with
  - models of other sensory modalities
  - models of planning and interaction with the environment
- studying these joint models in implementations of intelligent systems
jarmo.hurri(at)cs.helsinki.fi