

University of Hertfordshire

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Construction of Sensoritopic map

Finding structure in raw and uninterrupted sensor input

An extension of Lars Olsson's work

Integrate existing program into icub software

Based on Information Theory

Form information metric by computing information distance between sensors

General Idea

- Sensor definition
- Get Information metric by compute Information distance between two sensors. Information distance is calculated by summing the conditional entropy of two sensors (Crutchfield, 1990)
- Project the information matrix using relaxation algorithm (Pierce and Kuipers, 1997) into low-dimensional space (currently 2-D)