CNeuro2022 Lecture Abstracts

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Abstract 1 – Basic Lecture:

Understanding Sensory Computations through Adaptation

Adaptation is a key capability of the brain that allows it to shape the actions animals produce to environmental stimuli. It is also adaptation that permits a unique view into the workings of the nervous system: as adaptation is a form of optimization and it is the natural environment that shaped adaptation, natural images statistics can reveal the properties of the nervous system. In this talk I will rely on tools developed in machine vision to effectively deal with images matching the complexity of natural images. We will explore supervised and unsupervised architectures and discuss the insights these provide into the properties of the visual system.