

Scene Understanding Symposium

SUnS 2011

Friday, January 28, 2011

MIT Campus, Building 46-3002, 43 Vassar Street, Cambridge, MA 02139

<http://suns.mit.edu>

8:30 BREAKFAST

BUILDING SCENE REPRESENTATIONS: COMPUTER VISION

- 9:00 Out of Context Objects
Antonio Torralba (Massachusetts Institute of Technology)
- 9:20 SUN Database: Large-scale Scene Categorization and Detection
James Hays (Brown University)
- 9:40 Object Bank: A High-Level Image Representation for Scene Classification and Semantic Feature Sparsification
Fei-Fei Li (Stanford University)
- 10:00 Finding and Describing Objects within Broad Domains
Derek Hoiem (University of Illinois at Urbana-Champaign)

10:20 COFFEE BREAK - POSTERS

ATTENTION AND OBJECT RECOGNITION: MODELS AND NEUROPHYSIOLOGY

- 10:45 Untangling Object Identity Manifolds along the Ventral Visual Stream: A Direct Comparison of V4 and IT Neuronal Population Representations
James DiCarlo (Massachusetts Institute of Technology)
- 11:05 Object Decoding with Attention in Inferior Temporal Cortex
Robert Desimone (Massachusetts Institute of Technology)
- 11:25 What and Where: A Bayesian Inference Theory of Attention
Thomas Serre (Brown University)
- 11:45 Effects of Exploratory Saccades on Brain Activity and Visual Perception
Michael Paradiso (Brown University)

12:05 POSTER SPOTLIGHTS

12:30 LUNCH - POSTERS

BUILDING SCENE REPRESENTATIONS: COGNITIVE NEUROSCIENCE

- 1:45 Neural Construction of Scenes from Objects in Human Occipitotemporal Cortex
Russell Epstein (University of Pennsylvania)
- 2:05 Disentangling Neural Representation of Scene Content from Spatial Boundary
Soojin Park (Massachusetts Institute of Technology & Johns Hopkins University)
- 2:25 Property-Based Neural Representation of Space
Aude Oliva (Massachusetts Institute of Technology)
- 2:45 Objects, Places and Spaces: Pathways to Scene Representations
Chris I. Baker (National Institutes of Health)

3:05 COFFEE BREAK - POSTERS

- 3:30 Invariance to Mirror Image Reversals in Object- and Scene-Selective Cortical Regions
Daniel D. Dilks (Massachusetts Institute of Technology)
- 3:50 Object Ensemble Representation in the Human Brain
Jonathan Cant (Harvard University)
- 4:10 The Contextual Associations Network: Spatial and Temporal Characterization
Moshe Bar (Massachusetts General Hospital, Harvard Medical School)

SPECIAL TOPIC IN VISUAL COGNITION

- 4:30 Guided Search in Scenes
Jeremy Wolfe (Brigham and Women's Hospital, Harvard Medical School)

5:00 RECEPTION

Organized by: Aude Oliva, Thomas Serre, Antonio Torralba

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