DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE UNIVERSITY OF SOUTHERN DENMARK, ODENSE

COMPUTER SCIENCE COLLOQUIUM

Visual Object Tracking Using Deep Features

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IMADA's Seminar Room

Abstract:

The talk will focus on how to use Deep Features for enabling state-of-the-art results in visual object tracking. Visual object tracking is a challenging research problem in three respects, since a) it needs to be performed in real-time, b) the only available information about the object is an image region in the first frame, and c) the internal object model needs to be updated in each frame.

The use of carefully chosen Deep Features provides significant improvements regarding accuracy and robustness of the object tracker. However, state-of-the-art results require an appropriate fusion of multi-level Deep Features. By introducing a compact representation of Deep Features, smart fusion, and updating mechanisms, real-time performance is achievable without sacrificing tracking quality.

Host: Fabrizio Montesi