



DEEP MANTA

A DEEP DIVE INTO VIDEO STREAMS WITH ARTIFICIAL INTELLIGENCE

+ WHAT IS DEEP MANTA?

Deep Manta stands for “Deep Learning Many Tasks” : it sets the current frontier of performance for Artificial Intelligence applied to vision.

List developed this multi-task Deep Neural Network algorithm in order to perform advanced and efficient real-time analysis of video streams. One of Deep Manta’s differentiating strengths is the sobriety of needs, in terms of hardware and computing power : optimized architectures and algorithms enable taking full advantage of the capabilities of the deep learning approach. The system uses an ordinary video camera and the necessary processing resources can be fully embedded. These features make Deep Manta a robust and cost-effective way to obtain rich data from a standard video stream.

+ APPLICATIONS

- Autonomous vehicle perception systems (e.g. automotive, AGVs for manufacturing, drones...)
- Smart city, infrastructures management (e.g. pedestrian counting, no-stop city tolls with remote rate management, parking lot access, occupancy rates, etc.)
- Video surveillance (e.g. suspicious parcels, attacks, anomalous behaviors)
- Activity monitoring for smart buildings, Silver economy (e.g. activity monitoring and analysis, detection of emergency situations without video stream transmission)

+ WHAT'S NEW?

Deep learning is currently the most advanced approach to developing “smart” systems and, especially, automated vision systems. The native multi-task architecture combined with enhancements to conventional deep learning algorithms power a system capable of extracting simultaneously and in real-time different types and levels of information.



The system delivers excellent performance for each individual task but requires much less overall memory and processing power than parallel architectures that use one algorithm per task.

More material and videos: www.kalisteo.eu

INTERESTED IN THIS TECHNOLOGY?

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