

ICT with Industry 2017: Deep learning for visual verification

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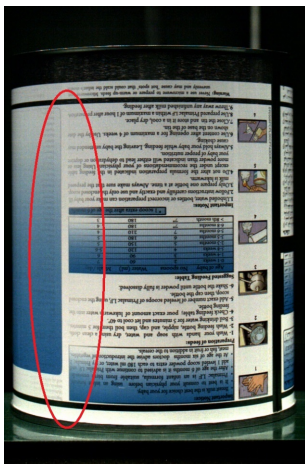
Abstract.

The case involves visual verification of objects. Current deep learning methods focus on object recognition, which detects the presence of existing objects. Instead, here, we already know the object that will be present, yet we want to verify their quality.

Use-case: Eagle Vision: <https://www.eaglevision.nl/>

The data and GPU compute power is provided by the company.

The case-study involves data coming from 6 cameras, doing visual verification of products. Some examples are given below:



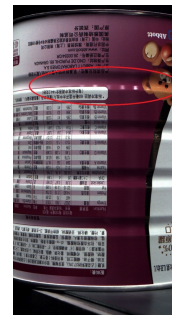
Misprint



Scratch



Dent



Nothing wrong

Workshop

The scientific question is visual verification versus object detection. We will brainstorm about the scientific state-of-the-art in deep learning, we will practically explore existing deep-learning frameworks to get to a prototype. The company involved (Eagle vision) generously offers high-performance computing resources (GPUs in the cloud).