Video Supplementary material

**A machine vision system to detect and count laying hens in battery cages**

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Animal journal.

**Short video - Hens were detected, tracked and assigned with identifications (IDs) in a video sequence comprised of successive frames. A green bounding box represents a hen that was detected in the current frame, a blue box represents a hen that was detected at least once but was not detected in the current frame. The # sign presents a hen's ID, and the number after the ID (#ID\_number) reflects the number of frames in a row in which a hen was not detected. After the last frame, the number of hens in the cage can be derived from the hens' IDs.**