Signify

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Using Computer Vision for Defect Classification and Anomaly Detection

Signify is the world leader in lighting for professionals and consumers and lighting for the Internet of Things. Signify's quality control process was highly dependent on human inspection. It's increasingly difficult to find people with the skills and experience to detect the tiny defects in the lamps Signify makes. So, the company carried out research to see how computer vision might help. The machine learning model was trained using images of 11 defective and 40 good lamps. Using an Industrial Axis camera, images were captured from all around the lamps. The Intel® Distribution of OpenVINO™ toolkit was used for anomaly detection and for defect classification. The study found that the Intel® Movidius™ Myriad™ X vision processing unit offered a good performance level, the Intel® Core™ i7 processor offered better performance, and the best performance was achieved by integrated Intel® Iris® Xᵉ Graphics.

Products and Solutions
Intel® Core™ Processors
Intel® Distribution of Open VINO™ Toolkit
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