MLOps automation in practice at Freudenberg Performance Materials

SOTEC helped Freudenberg Performance Materials to automate the generation of ML models for improving their inline visual quality inspection processes for non-woven products.

The challenge

Google Cloud Vertex AI is a powerful cloud service for rapid and efficient training and deployment of machine learning models. However, using Vertex AI in industrial use cases still involves a lot of manual work in field data acquisition and data set generation. This can be a significant barrier to adoption, as it requires specialized expertise and can be time-consuming and error-prone.

The solution

To address this challenge, SOTEC developed a one-click-train service for Vertex AI cloud service model training. This service automates the data acquisition and model training process, making it easy for the Freudenberg staff responsible for product quality to train or improve ML models without the need for specialized expertise in MLOps.

The result

The one-click-train service is a valuable tool for Freudenberg Performance Materials staff, as this service automates the data acquisition and training process. With the service integrated, the overall solution is generating significant time and cost savings while helping Freudenberg to get their ML models into visual production quality inspection faster and with great reliability on the results.

> 66 SOTEC has brought us into the world of applied AI for manufacturing, using best-in-breed Google Cloud AI technologies for solving some of our everydays challenges in manufacturing quality inspection. From the first touchpoint with the new technology until operating it in our production lines, SOTEC has been guiding and supporting us through all phases of our journey into AI in manufacturing. 99
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> Dr. Jörg Ude, Director Global Digitalization, Freudenberg Performance Materials

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About Freudenberg Performance Materials
Freudenberg Performance Materials is global manufacturer and innovative pioneer in the field of nonwovens, producing high-performance technical textiles for a wide range of applications for customers in automotive, building materials, clothing and healthcare manufacturing sectors.
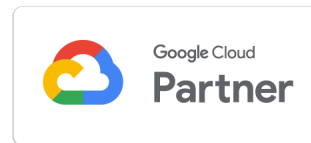
Vertical/horizontal solution: Manufacturing & Industrial

Primary project location: Germany

SOTEC

About SOTEC GmbH & Co KG
SOTEC is a leading expert in advanced automation technology and a long-standing Google Cloud IoT and ML implementation partner.

Google Cloud
Partner

Products
Google Cloud Platform