

Gen AI empowered robotics

SOTEC developed a solution to demonstrate the control of complex robotic systems using the power of natural language processing with Google's Gemini language model.

The challenge

Controlling robots requires a multidisciplinary skillset, encompassing knowledge in several areas. Writing code is necessary to control robot actions, as well as implementing algorithms for object detection and decision-making. For educational purposes it was requested to have a tangible show case demonstrating the capabilities of generative AI to control robots.

The solution

The solution included a web based UI enabling users to enter commands, describing the task they wanted the robot to perform. A built-in camera captured an image of a workspace containing objects in various shapes and different colors. Gemini used object details and the user's natural-language instruction to break down the task into logical steps and formulate a solution strategy for the robot

The result

This educational show case clearly demonstrated how easy and intuitive it can be to control the Niryo Ned2 robotic systems using the power of natural language and Google's Gemini language model. The goal was achieved to make the control of robotic applications more efficient and faster.

“We have been impressed by SOTECs engineering work and expertise to develop a tangible showcase to automate robots control with a high level of accuracy by using Google's Gemini and our Niryo Ned2 robot.”

Juliette Decamps, International Partner Manager, Niryo



About Niryo

Niryo is a French startup specializing in the design and manufacture of desktop collaborative robots. Their focus is in democratizing cobotics and allowing its accessibility, while promoting a new vision for industry tinted with reason, humanity, durability and resilience.

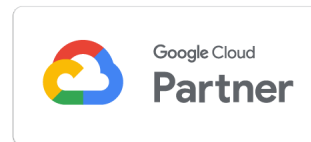
Vertical/horizontal solution: Industrial Goods & Manufacturing

Primary project location: France



About SOTEC GmbH & Co KG

SOTEC helps clients build digital solutions with the benefits of IoT, ML and Cloud Technology. From specialized hardware to end-to-end platforms.



Products

Google Cloud Platform