Cromai uses Google Artificial Intelligence, Algorithms, and drone images to promote a more sustainable agriculture

Cromai
Brazil

"Without artificial intelligence, it would not be feasible, nor scalable, to develop a solution to solve the weed problem. With AI, it is much easier to learn the diversities that exist in plantations around the world and the computational capacity and all the support from Google were fundamental to enable the evolution of our AI and the scale of the company."

Guilherme Castro
CEO and cofounder, Cromai

Challenge
Brazilian agribusiness faces a crucial challenge: producing food on a large scale for an increasingly populous world with fewer resources. One of the main problems faced is the proliferation of weeds, which competes directly with crops for water, nutrients and light, damaging the development and productivity of plantations. Chemical control with herbicides, although efficient, leads to the emergence of plants resistant to these compounds, which compromises productivity and increases costs.

Solution
To overcome this challenge, Cromai has artificial intelligence (AI) as an ally. The startup has developed a platform that uses proprietary algorithms in conjunction with Google's AI to identify and combat weeds. Using machine learning, the platform analyzes images of the plantation captured by drones and maps the presence of weeds, identifying the exact location they occupy. This way, the producer applies the herbicide only in the necessary areas.

Outcome
With data reported by its customers, Cromai shows that, in this way, the producer optimizes the process and reduces the use of herbicides and water by more than 60%, allowing an immediate return of R$100 per hectare, contributing to a more economical and sustainable operation.