

Aigen unveils World's first AI-Driven, Solar-Powered, Agricultural Robotics Service

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Aigen, a Seattle-based agricultural technology startup, unveiled a groundbreaking autonomous, scalable robotics platform, powered entirely by solar and wind energy. Leveraging proprietary, quantized AI, the Aigen Element service is the only farming solution that decreases fossil fuel use, while also providing farmers with invaluable real-time field insights, increased time savings, and reduced costs. Aigen connects farmers to breakthrough technologies, decarbonize agriculture, and improve human and planetary health.

"Aigen was founded on the idea that there should be an alternative to the fossil fuels and pesticides used to produce our food. We have been working closely with farmers, like my family in Minnesota, to develop a solar-powered, on-edge AI platform that makes precision Ag scalable," said Rich Wurden, co-founder and CTO of Aigen. "We are excited to share those tools with the introduction of the Aigen Element."

Kenny Lee, Aigen's co-founder and CEO says "benefits of our advanced, lightweight, super agile robots go far beyond weeding. We are excited to deliver field-level network connectivity and real-time data and insights that farmers can access from anywhere. Solution reduce farmers costs and get rid of weeds, all while growing healthier crops,"

Artificial Intelligence, Powered by Renewable Energy

Aigen's unique robotic solution is possible thanks to the company's proprietary quantized AI, which is so efficient it can run exclusively on renewable energy. "The average cell phone needs 4 Watts of power. Our AI

models need only 1.5W, and everything about our vehicle is just as efficient. Paired with a custom 205W solar panel, our robots often generate a power surplus at the end of a full day of running," added Wurden.

Plant-Level Data, Planetary Connectivity

Aigen's vehicles continuously transmit field and crop data to an in-house developed mobile app, offering farmers real-time insights. "We're bringing satellite technology down to earth, and deploying mesh network connectivity built on a robust, self-reliant hardware platform. This offers farmers higher resolution, real-time data and helps them get ahead of problems," said Puneet Khattar, Aigen's head of electrical engineering, who previously worked on Amazon's satellite program and at SpaceX.

Rugged and Agile Hardware

Every aspect of the Aigen Element robot is built for maximum efficiency on the farm. The lightweight frame and solar panel, paired with regenerative motors and rugged suspension, allow the robots to effectively navigate and weed row crops for up to 14 hours a day in nearly any weather condition.

The Aigen Element Service will debut on over 20,000 acres of U.S. farmland in 2024.