



Significantly decreasing irrigation using our form of precision farming

The way we use water is not sustainable.

70% of all fresh water is currently being used in agriculture. All of that is being used for irrigation. The problem is, too much of fresh water is being used on agriculture. We've concluded that the reason for this is because the systems for irrigation are not efficient enough.

Solarum makes irrigation systems more efficient.

Solarum changes the way we currently go about using water. We use a multitude of exponential technologies to create a 3-step process to automate and optimize agriculture and irrigation practices by gathering data from the farm as well as others around it.

Precision Farming

We use drip irrigation and laser leveling by using a laser guidance system to flatten fields to higher precision. This is combined with an AI system that calculates where we need to use laser leveling.



Inputting Data

The first step of the cycle is the collection of data for a group of crops within the farm.



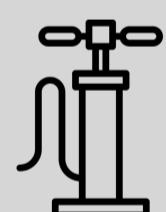
Computing The Data

The AI calculates how many acres will be necessary based upon data (humidity, temperature, conditions, moisture)



Laser Leveling

Based on the information that the AI gives it, an Autonomous Vehicle will precisely laser level the calculated area.



Changing The Pump

To conclude the process, the data that the sensors get is uploaded to a cloud and the irrigation pump changes based on the gathered data.



Sowing More Plants

After the laser leveling is done, the same vehicle will sow plants in the laser leveled areas. This is to ensure getting data is much easier.



Imprinting Sensors

In order to get data, the vehicle adds sensors on the plants. This helps get data on them about moisture content, and other pieces of data.

How it works



"We want to completely change the way the world uses water"

- Rishi Mehta, Co-Founder



"The world needs a better way of using the resources that we have"

- Arnav Shah, Co-Founder



"Our new approach to this problem has never been done before"

- Ankur Boyed, Co-Founder