

SolaNet

Unlock undiscovered solar energy potential
with the help of AI

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A wide-angle photograph of a solar farm in a cold, arid environment. Rows of solar panels are mounted on metal frames and stand in a field covered with patches of snow and brown ground. In the background, a range of mountains with prominent peaks covered in white snow stretches across the horizon under a clear blue sky.

MOTIVATION

Motivation

Hard to use calculators

Due to the difficulty of existing solar panel system estimations, many suitable areas

Many unused areas

U.S. Commercial Rooftops Hold 145 Gigawatts of Untapped Solar Potential

Solar energy for more sustainable energy

The energy sector is one of the largest emitters of CO₂ emissions. Green energy solutions like solar panels play a vital role in reducing emissions.

A solution powered by AI

By combining broadly available satellite images and semantic segmentation computer vision, we built an app that allows virtually anyone in the world to consider a solar energy solution.



A dark blue background featuring a complex network graph. The graph consists of numerous small, glowing blue and yellow dots (nodes) connected by thin, translucent grey lines (edges) forming a mesh-like structure. The lighting is dynamic, with brighter highlights on the left side and darker shadows on the right, giving it a three-dimensional, futuristic appearance.

High level
processing
overview

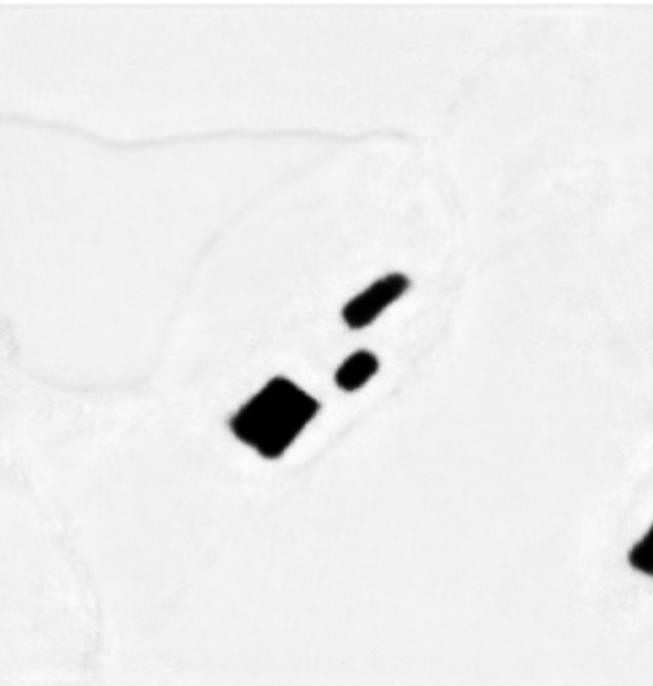
Processing

1. User enters address where a potential solar panel system should be evaluated
2. Respective satellite imagery is pulled from MapBox
3. Our trained model isolates the roofs and calculates the surface area

Results of our model



Result



Target



Processing

Further analysis is executed and displayed based on
available surface area

A wide-angle photograph of a solar farm in a cold, arid landscape. In the foreground, numerous solar panels are mounted on metal frames, stretching into the distance. The ground is covered with patches of snow and brown earth. In the background, a range of mountains with prominent peaks covered in snow rises against a clear blue sky.

Live Demo

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Thank you for your attention, we are looking forward to your questions!