

IDP COPSUN AUTOMATED ROBOTIC SOLUTIONS FOR SOLAR PANEL MAINTENANCE



ABOUT COPSUN

Optimizing the efficiency of solar farms is essential for accelerating the transition to clean energy. However, manual maintenance of solar panels is time-consuming, costly, and inefficient.

At COPSUN, we tackle this challenge by developing robotic solutions for automated solar panel cleaning and monitoring. Our robots use AI-powered technology to ensure optimal energy generation, reduce water consumption, and extend the lifespan of solar infrastructure. By integrating sustainable materials such as recycled aluminum and second-life batteries, we reinforce our commitment to environmental responsibility.

We are currently validating our solutions with key industry players. Our goal is to expand our product offering and establish a strong market presence in the solar energy sector.

YOUR PROFILE

- You are a team of 2-4 passionate individuals.
- You have a strong drive for innovation and problem-solving.
- You have experience in project execution and self-management.
- You are skilled in AI, or web development.
- You are interested in creating intuitive UX/UI and building cutting-edge software

WHY JOIN US?

- **Impact:** Be part of an innovative company revolutionizing solar energy maintenance and contributing to a greener future.
- **Growth:** Work in a fast-paced environment where you can apply and expand your technical skills.
- **Networking:** Engage with industry leaders and gain exposure to the renewable energy sector.
- **Culture:** We value creativity, collaboration, and sustainability. Our team is dedicated to making a difference in the clean energy landscape.

PROJECT: AI-DRIVEN SOLAR PANEL CLEANING AND MONITORING

Solar farms require frequent maintenance to maximize energy output. Traditional cleaning methods are labor-intensive, use excessive water, and fail to detect panel malfunctions.

COPSUN's robotic solution autonomously cleans and inspects panels, reducing operational costs and improving efficiency. Our AI-powered system detects anomalies and provides real-time data analytics, allowing solar farm operators to optimize performance while minimizing environmental impact.

Our solution aligns with sustainability goals by using minimal water or dry-cleaning methods and leveraging AI-driven insights to enhance panel longevity. This technology is particularly beneficial for large-scale solar farms looking to reduce costs and environmental footprints.

To enhance the value of our solution, we are developing a data visualization platform where robots can transmit real-time information about solar panels. This platform will display thermal imaging and individual panel diagnostics in an intuitive and user-friendly interface, similar to Power BI. By leveraging AI-driven analytics, solar farm operators will have actionable insights to improve maintenance strategies and maximize energy output.

APPLICATION

- **Start date:** Pending (flexible start dates available).
- Please send your CV and relevant project experience.
- No need for cover letters; instead, provide two references and rate your skills (1-10) in relevant areas such as AI, software development.
- **Desirable:** basic Spanish.

Join us in shaping the future of solar energy maintenance!



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