

Harvesting Reusable Energy through Solar Forecasting



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CURRENT RESEARCH

Increasing efficacy in solar power plants

Cloudy skies can slow down solar energy farms. But what if there was a system to track clouds and make solar power plants more efficient? Dr. Carlos Coimbra and his team at Coimbra Energy Group at University of California, San Diego believe they have found that solution. His team is the premier research team in renewable energy. They specialize in the development of solar power farms and their main objective is to find ways to make solar plants run more efficiently. His current research focuses on the development of high fidelity, evolutionary forecasting engines for renewable energy integration. A field of study that lies at the intersection of Artificial Intelligence, Meteorology, Applied Mathematics and Renewable Energy Technologies.

- Coimbra Energy Group's primary research goal is to develop the highest-fidelity forecasting engines for variable energy resource integration, focusing mostly on solar and wind generation.
- The Group uses a diverse network of solar observatories to harvest valuable ground data to be used in forecasting.
- Coimbra aims to develop forecast engines that span the whole spectrum of temporal horizons and spatial resolutions. Renewable energy sources are the way of the future. Tracking the sky to get the most out of reusable energy will allow cost-saving alternatives to current means of capturing energy and it may also help communities track weather and prepare for future weather disasters.

AFFILIATION

 University of California, San Diego

EDUCATION

- PhD in Engineering 1998 ,University of California, Irvine

RESEARCH AREAS

Environment, Clean Energy, Natural Disasters / Emergency, Clean Energy

FUNDING REQUEST

Your donations will assist Professor Coimbra and his Energy Group to expand the horizons of their research, and allow them to discover quicker and more efficient ways of harvesting this renewable energy.

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