**Photovoltaic power and solar radiation forecasting**

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1. **Description**

The main theme of the project is photovoltaic energy generation forecast. The objective is to reproduce and extend the methodology to improve the results found in the reference paper, that uses a deep learning approach to predict power output from images of the sky captured with a camera installed near the solar panels.

1. **Project Steps**
2. Literature review
   1. Papers selection
   2. Write
   3. Review
   4. Deliverable 3 (Literature review) - February 25th 2022
3. Development I – Paper replication
   1. Data collection
   2. Data preparation
   3. Model Part I - Physics-based non-parametric classifier
   4. Model Part II – CNN Network
   5. Train and Evaluation
   6. Deliverable 4 (Methods and preliminary results) - March 18th 2022
4. Development II – Improvements
   1. Data augmentation
   2. Other improvements (to be defined)
   3. Evaluation
   4. Deliverable 5 – (Results and conclusions) - April 1st 2022
5. Oral presentation
   1. Presentation preparation
   2. Deliverable 6 (Presentations in class) - April 13th 2022
6. Report
   1. Write
   2. Review
   3. Deliverable 7 (Final report) - April 29th 2022
7. **Distribution of the work**

The work distributions across the team will be defined soon.