Machine Learning for Solar Panel Fault Detection

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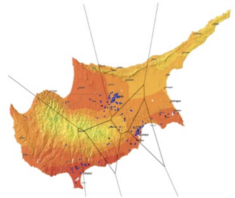

- ❑ Obtain solar data with 10 features and 5 classifications.
- ❑ Pre-process data (normalization, one-hot encoding, train/validation/test split).
- ❑ Train SKLearn’s Logistic Regression model to detect solar soiling faults in the system.
- ❑ Compare binary classical and quantum results

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Test accuracy =  97.94
F-score =  97.96
Precision =  97.76
Recall =  98.15
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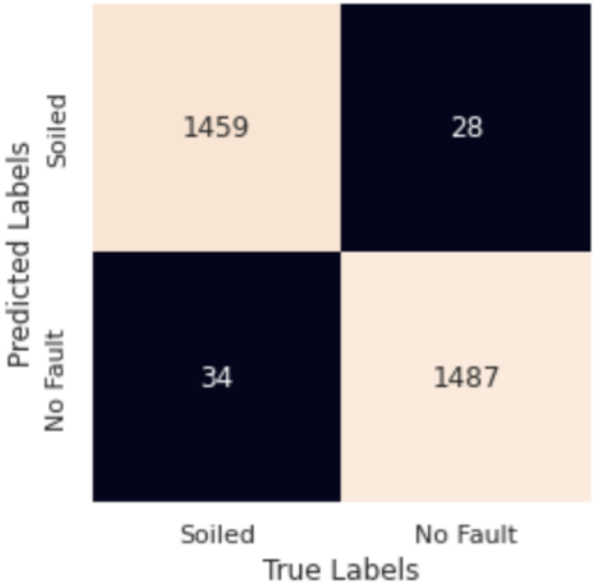

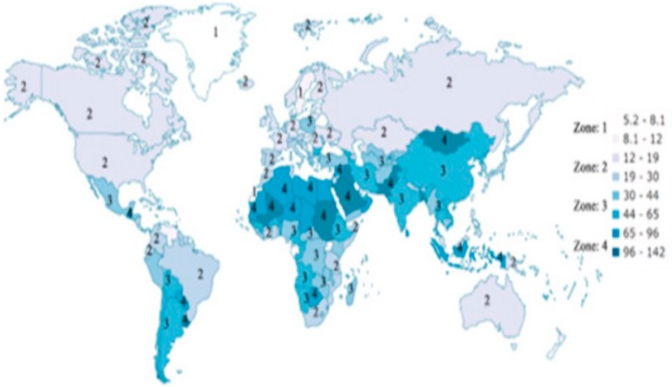

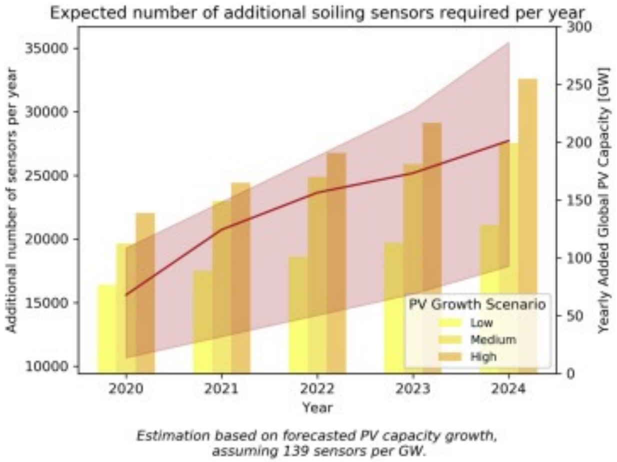

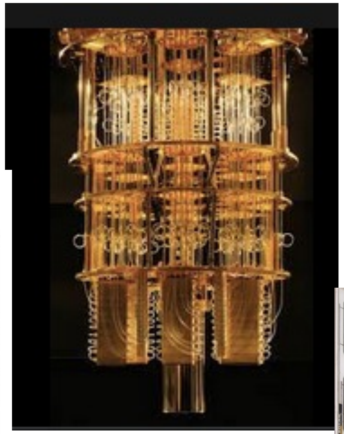

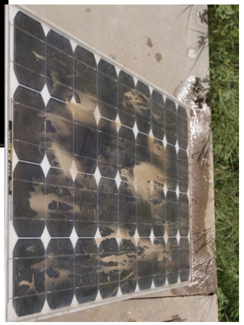

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SenSIP Sensor, Signal and Information Processing Center

National Science Foundation

KOIOS Research and Innovation Center of Excellence

University of Cyprus

Sensor Signal and Information Processing Center: http://sensip.asu.edu/nsf-ires-project

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