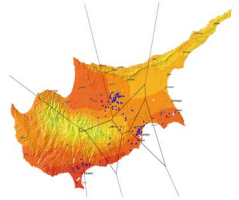
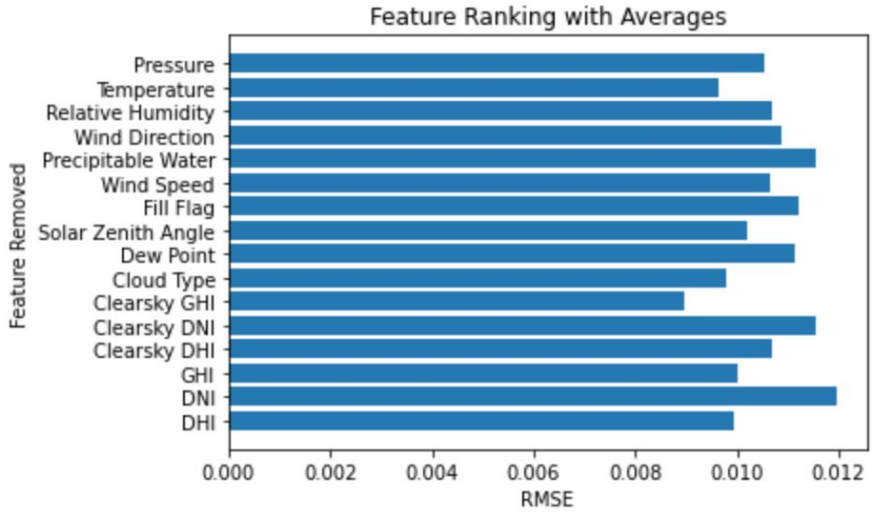
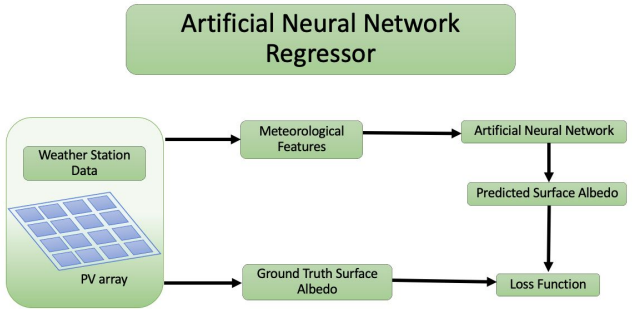
Surface Albedo Prediction using Artificial Neural Networks

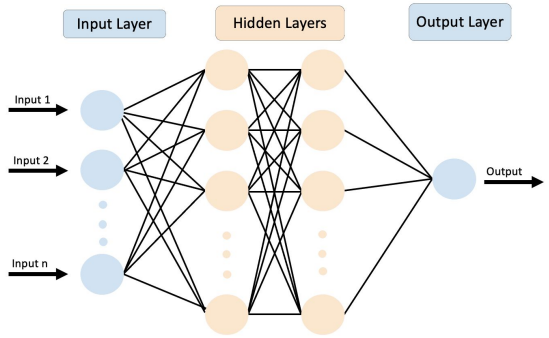
Niki Kyriacou[1], Sameeksha Katoch[2], Andreas Spanias[2], Yiannis Tofis[3]
[1] Arizona State University Department of Physics [2] School of ECEE at Arizona State University [3] KIOS Center at University of Cyprus

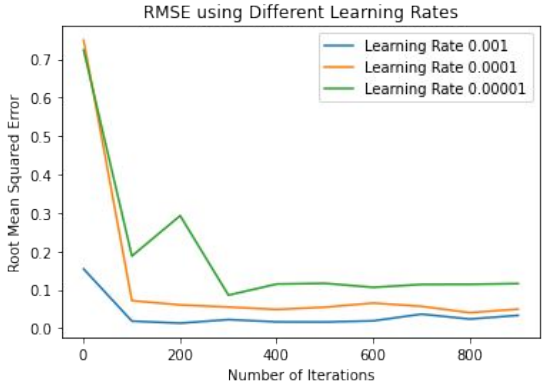


- ❑ Obtain weather data from NSRDB dataset.
- ❑ Pre-process data (standardization, one-hot encoding, train/test split).
- ❑ Determine how many layers, nodes, and iterations are optimal for neural network.
- ❑ Train MLPRegressor to perform surface albedo prediction.
- ❑ Use RMSE as a metric to calculate the distance between ground truth and predicted surface albedo.
- ❑ Evaluate RMSE with varying learning rates, activation functions, solvers, and batch sizes.
- ❑ Use feature removal to rank which features correlate most strongly to surface albedo.









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