

DSC672: Winter, 2019

Analytical Project, Milestone 1: Team information and analytics project proposal

Team Members:

Steve Rummel, Tyler Jewell, Sibi Augustin, Ricardo De Leon II and Prabhakaran Raghavan.

Team leader, for purposes of submitting assignments timely:

Steve Rummel

Project Proposal:

We are choosing the previously-specified 'Energy Consumption and Renewable Energy' project. As such, we are not submitting a data dictionary or related documentation at this time, however we will be following the original specification as follows:

We will build a forecasting model for hourly photovoltaic solar and wind electrical energy production, total electrical energy consumption by hour for 8 key sectors of the city. The goal is to determine how much renewable electrical energy will be supplemented to the local power supply.

Rough Outline:

Week 1

- Team creation
- Project proposal

Week 2 (Milestone 1 Due 01/16/19)

- Understanding of datasets
- Exploratory Data Analysis

Week 3

- Continue with Exploratory Data Analysis
- Prepare a 3 - 4 page document describing the preprocessing steps
- Prepare video recorded presentation

Week 4 (Milestone 2 Due 01/30/19)

- Build a model for hourly wind electrical energy production
- Build a model for hourly solar electrical energy production
- Build a model for hourly electrical energy consumption

Week 5

- Continue with building the models
- Prepare slides of current analysis
- Document future plans for completing the analysis

Week 6 (Milestone 3 Due 02/13/19)

- Evaluate that the models work
- Perform adjustments with the models as needed

Week 7

- Document milestones after the prior status check
- Document issues and challenges encountered

Week 8 (Milestone 4 Due 02/27/19)

- Finalize the models

Week 9

- Complete presentation
- Start working on the project report

Week 10 (Milestone 5 Due 03/13/19)

- Complete 10 – 12 page report describing the analysis tasks and findings

Week 11 (Project report Due 03/20/19)

- Submit Project report