DATSR User Documentation

Release 0.1

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ONE

GETTING STARTED

Welcome to DATSR! This document is to help you get a little more acquainted with our website and guide you through the use of our revolutionary online time series repository.

Note: For questions about this document or anything else related to DATSR, feel free to get in touch with the team at duxdzine@not_real_mail.com or by calling our help line at 1-800-867-5309.

Now let's go through each of the sections in the user documentation to get a better idea of the content we'll be covering.

1.1 Overview

In this section we give an overview of the functionality of DATSR.

1.2 The Site

This section of this document describes the web interface which acts as the frontend to the DATSR application. Here you will find descriptions of the individual pages, tutorials on how to interact with the user interface, and general site navigation.

1.3 Input Formatting

In "Input Formatting" we describe how inputs into the DATSR system should be formatted. This includes instructions for formatting files containing predictions or new data sets as well as formatting for filling out forms available on the site.

1.4 Scoring

Here you will find a more in depth guide to how the scoring works on DATSR. You will find the statistical methods that were used for the ratings generated as well as justification and a little bit of background for the mathematics behind our calculation.

CHAPTER

TWO

OVERVIEW OF THE SYSTEM

DATSR is first and foremost an online repository built with time series data in mind. This means our site goes beyond simple data storage by providing features specific to TS datasets such as hierarchical/set structures, automatic validation/testing set division, and metadata specific to TS data sets.

In addition to providing a repository for time series data, DATSR also has a built in system for testing predictions made on time series. The site allows you to upload their data to see the effectiveness of their predictions not just in the score reflected, but also by ranking you among everyone else who has submitted to DATSR.

CHAPTER

THREE

THE SITE

The website for DATSR is composed of four pages each providing unique functionality and information to you the user. The navigation bar at the top can be used to seamlessly switch between the different parts in the modularized application.

The details of each page's functionality and interface are given below:

3.1 Home Page

This page can be reached by clicking the app name in the top left corner of the site. On it, we provide an overview of our application including its functionality, the names of our team members, and our story. Also available on this page is a link to the html version of this user documentation for convenient access.

The home page is where users will land when they first visit the site and is meant to orient them to the application's interface as well as provide easy access to other pages through the navigation bar.

3.2 Score Board

This page displays the "scores" that users of this application have achieved by entering their predictions using the "Enter Your Predictions" section of our site (See [LINK]).

To use this page simply…

At the top you can see the 5 users with the highest score for that particular dataset–their success has been rewarded by placing boxes around their names. Below that there is a section for other users' scores who were not able to make the top 5.

3.3 Upload Your Files

This page is where users can upload either new datasets to be added into the repository or predictions they have made for datasets they have previously downloaded and built predictive models for.

To upload a new dataset into the repository users should…

To upload predictions for an existing time series data set users can…

3.4 Databases

On this page you can find all of the time series data sets available in the repository. For each data set, meta data is displayed that helps you to narrow down which data set you would like to download. Each data set also has a download button which automatically adds a .csv file containing the training data for the set to your browser's downloads folder.

CHAPTER

FOUR

INPUT FORMATTING

In this section we go over how users should format their data in order to upload it to the DATSR site.

CHAPTER

FIVE

SCORING

The first component of scoring algorithm to address is the "score" value generated which is the primary evaluation provided and dictates where the users fall on the score board built into DATSR. The following equation shows exactly how this value is calculated.

[equation]

How did was this computation derived? We began with [**N**] common statistical methods for measuring error which were: [blank]. We then combined them through trial and error to make the following congregate statistic:

[equation with letters substituted in]

The individual components that make up this congregate value are common in the field of statistics. Their definitions (i.e. how to calculate them) is shown in the mathematical equations listed below:

[list of how to calculate individual components]

Beyond these statistics, our application also displays [blank] which is not included in the congregate "score" value, but still has its place in statistical reasoning and was therefore included along with the rest. This value is calculated using the following algorithm:

[final equation]