CS670/470 Team Project Phase 3: Long-lead Forecasting of Extreme Precipitation

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1 Educational Goal

Practice how to train and evaluate classification models.

2 Details

Project goal: Train classification models on the training samples got from SAOLA and then evaluate

them on the test samples.

Due Date: 3:00 pm, December 21, 2017

Programming language: Python 2.7.

3 Tasks

3.1 Task 1

Split the experimental samples (with selected features) into two parts: first 9497 samples for training and last 1803 samples for test. Do normalization on the experimental samples.

3.2 Task 2

Review the lecture notes in "CS670_Team_Project_Part2.pdf", choose two classification models mentioned in the lecture notes and train them on the training samples.

3.3 Task 3

Evaluate the classification models on testing set, calculate accuracy and AUC, and draw ROC curve.

4 Experimental Samples

Download the experimental samples for phase 3 assignment through the following link:

http://kdl.cs.umb.edu/CS670/data/

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5 Submission Requirements

Submit the code and a report (include the accuracy and AUC score, and the ROC curve) through your UMassOnline account. Each team can submit a single solution through the team lead's UMassOnline account; the submission should include a list of all team members' names.

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