Term Project Phase I: White Noise Removal

(100 points)

Assigned Date: Wednesday, October 30, 2013

Due Date:

1st deadline: 4:00 PM Wednesday, November 6, 2013

Final deadline: 4:00 PM Wednesday November 13, 2013

Educational Goal

Become familiar with the WCL project and apply machine learning to white noise removal on temperature data and ISE reading.

Requirements

- Discuss your progress report with the Instructor at the first deadline (no submissions for this deadline).
- Write a report to discuss the method you use to remove white noise from temperature and ISE reading of Sodium (Na^+) for all the first-sample data (Sol030, Sol041, Sol096, Sol107). The report must include Introduction, Method, and Experimental Results. The report should include graphic plots of the temperature and Sodium readings before and after white noise removal.

Submission Requirements

1. One submission per team.
2. Submit all the scripts you used for this project.
3. Submit the denoised data for this project.
4. Submit a single zipped file of all the files of this assignment through your UMassOnline account. Submit the paper copy along with the cover page in class. Paper copy should be bound firmly together as one pack (for example, staple, but not limited to, at the left corner). 5 points will be deducted for unbounded homework.
5. Name your file with AI_ lastname_firstname_team#_ph1. For example, team 1 should name their file as AI_team1_ph1.zip.
6. No hard copies or soft copies results in 0 points.
7. Demonstrate your project with the Instructor on November 13 after the class.