**AIPI 510**

**Assignment 1**

This week we introduced the CRISP-DM data science process and discussed one approach to implementing it via a set of detailed sub-steps. We then walked through a real-world example of implementing the steps in the CRISP-DM process in the development of a power outage prediction tool for utilities.

Your assignment this week is to select a problem and create a brief (1 page maximum) write-up walking through the CRISP-DM Steps 1 and 2 (Business Understanding and Data Understanding) for your problem. The problem you select to focus on can be from any field.

In it you must make sure to address each sub-step / question within Steps 1 and 2 (e.g. under Step 1: Business Understanding you must address each item under sub-steps 1.1 Define the Problem, 1.2 Define Success, etc. For the activities in the Data Understanding step you are not expected to perform the activities, you should merely describe in written form what you would expect to do if you were actually working on the project, and note any particular challenges you would anticipate for your problem (e.g. are you merging data from various sources? Do you expect a lot of noisy/missing data? Where might you get labeled target data, or do you have to manually label data prior to any modeling?)

Your work will be evaluated on whether you are able to demonstrate a solid understanding of the activities involved in each of the process steps and whether you are able to apply the process to a new real-world problem. You will NOT be evaluated on whether you are able to present “correct” answers for each step/task – at this point in solving your problem, you will likely need to make many assumptions**. *In your writeup, make sure to organize your writing by step/sub-step (e.g. using titles/subtitles for each part) so we can more easily map your writing to the relevant steps in CRISP-DM.***

**Please submit your writeup (pdf or .doc) via Sakai prior to the start of next class.**