Computational Thinking
PSYC 315/MGTS 315
MacEwan University

Weekly Assignment: Pattern Recognition

In this assignment, you are asked to identify patterns for the problem you are facing. You may use the same problem as for your Decomposition assignment or something else.

In general, there are often discernable patterns both within the respective problems and also across problems. A few key questions to ask to get started are whether:
[a] There are any patterns at all?
[b] There are similarities between this problem and something you have solved before (or will solve)?
[c] There are shared qualities/patterns among the different parts of the problem?
[d] Anything repeat?

In doing so, make sure to identify and discuss all of the relevant patterns and empirical regularities you deem will have a bearing on your problem's future purposeful resolution. The idea is to think of patterns like building blocks with some generic qualities; once a procedure has been thought out for one of the problems, these insights can help us in other similar problems. This way of thinking will benefit you when you design an algorithm later on in this course.

Make sure to state clearly at the beginning of the paper what your problem is and sketch out the basic sub-problem structure.

Four articles have been uploaded along with the Screencasts and Slides, touching upon aspects and dilemmas of pattern recognition (some mentioned in the screencasts). When you analyze the patterns you deem will impact your problem, integrate and reference findings from the four papers. For example, this could be a discussion of features vs classifiers or scrutiny in detecting noise vs pattern.

Use a maximum of 1000 words.