**IMP Glossary**

Algorithm: A well-defined method through which we can achieve *market prediction*. Algorithms included with the base product are: *exponential smoothing*, *Markov chains*, and *moving averages*.

DAEMON: “DAEMON for Algorithm Enhancement, Modification, Or Novelty.” This program, included with the product, is used to add new *algorithms* to the *IMP* program, or to test them out.

Exponential Smoothing: This *algorithm* is similar to the *moving average*. However, it weights data exponentially more as they move towards the current time.

IMP: “IMP for Market Prediction.” The base program, IMP will be able to run a user-selected *algorithm* designed for *market prediction*.

Market: Any good (whether physical or not) that is able to be assigned a value. *IMP* will have built in functionality for collecting data from the stock market, but will be also be able to use user provided data.

Market Prediction: The use of knowledge of past trends to obtain probable future trends in a *market*.

Markov Chain: This *algorithm* defines each day as one of three states: increase, decrease, or no change (relative to the day before). It predicts the next state based on how the current state has acted in the past. In addition, it can look at series of states; for example, if the last three states were “increase, increase, decrease,” the algorithm can try to find previous instances of that series, and then examine what the next state of that series tends to be.

Moving Average: This *algorithm* smoothes out a data set by dividing it into subsets of a user-defined size, and then taking the average of that subset. After the data is smoothed, it becomes easier to get an overall trend and therefore obtain the next data point.