MSAN 610
Project 1 Proposal

Brendan J. Herger

September 8, 2014

1 Proposal

For my MSAN 610 Project 1 presentation, I would discuss the theory related to and one implementation of Pool Mapping in Python (multithreaded mapping using a built in Python module). In particular, I my presentation would aim to inform the audience of the use cases, benefits and detriments of Pool Mapping.

1.1 Theory

For the theory section of my presentation, I will briefly discuss how mapping works, as well as a very brief discussion of how multiprocessing works. Additionally, I will mention the speed improvements and overhead detriments associated with using a Pool map.

Additionally, I will *not* discuss the need for multiprocessing in lieu of multithreading in Python, nor the Global Interpreter Lock in Python.

1.2 Implementation

For the implementation section, I will provide code snippets (to be available digitally on my GitHub), and possibly a live demo which highlights the speed-ups provided by using multiprocessing. The code I will provide will be designed to quickly replace the built in map or list comprehension.