Over the last couple weeks I have been able to submit several DNN training jobs on Theta, but have run into several issues. Early on I ran into some issues with the data science modules not loading correctly, but those issues have been resolved. The main issue has been the OS run-time error displayed below. After inspecting the TensorFlow code, I have been able to locate the problem. In the DNN training code I am loading the MNIST dataset via the Keras library. However, the Keras library is attempting to fetch the dataset from an external Google server. Theta compute nodes do not allow users to connect to external URLs. To resolve this problem, I have obtained the MNIST dataset and installed it locally on Theta. I am now working on changing the code to consume this local dataset and properly slice the data among the ranks. Regarding the selection of a profiling tool for internode communication, Dr. Lan was able to confirm that Horovod has a built-in profiler. We will be using this tool as we move forward. Over the next couple weeks, my main goal is to resolve the MNIST dataset issue so we can begin collecting data on internode communication.