Monthly Summary: September, 2020

The primary goal of the work this month was the development of an interface between existing PSCAD code and `QRFactor`. This process required a fundamental shift in the implementation of `QRFactor` from a more standard, single-file CUDA project to a more object-oriented approach. In figure 1, we present a schematic of the structure of the QRFactor class.

See Chapter 6 in the CUDA NVCC Guide.

Example of separate compilation and linking with mixed host and device functions.
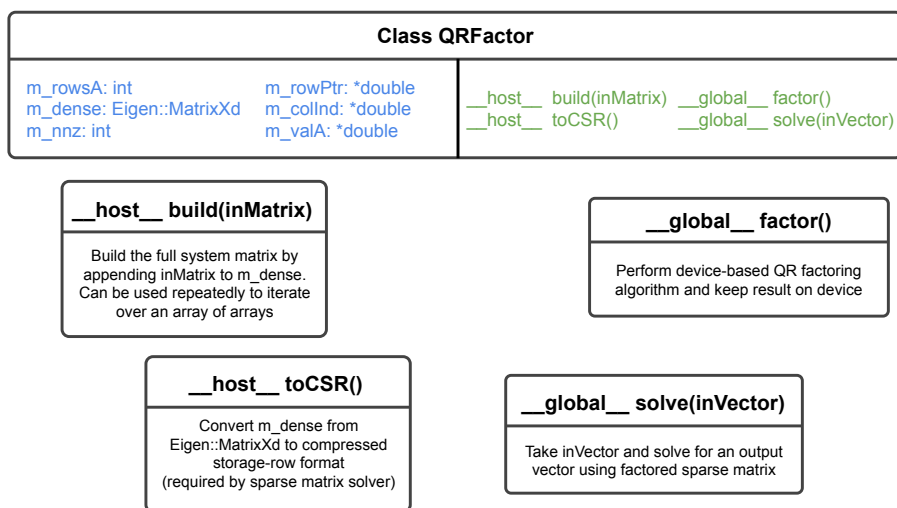

Figure 1: Schematic of the QRFactor class. Class variables are shown in blue while class functions are shown in green.