Phylanx Meeting

January 25, 2018

* Adrian, Stefan, Bibek, Ali, Shahrzad, Parsa, Connor, Hartmut, Rod, Monil, Kate, Kevin, Chris
* Chris
  + Blaze passes constructor and unit tests
    - Working on matrix multiplication
  + Expression tree front
    - Knight Graehl implementation
  + Hartmut- Could space filling curves be sped up with SIMD?
    - Chris- I believe so
* Ravel (Kate)
  + Re-Installing Ravel on Rostam
    - Katie is working to test the web front end
  + Was able to build LRA (without APEX)
  + Ali- I was able to compile Phylanx with Clang
    - Will send build instructions
* APEX (Kevin)
  + Hartmut and Kevin will meet on Friday at 2pmCT/12pmPT
  + Buildbot was down for a few weeks
    - Someone pulled out the network cable
    - Updated the Python version to 3.6.4 (for all machines)
  + Two tests are timing out
    - Not certain what is happening here
    - Could be a deadlock
  + Monil – Uploaded code for NumPy, Tensorflow, and Spartan
    - Profiles for all except Spartan
* Tiling
  + Stephan-
    - Nothing concrete
* Algorithms & Primitives (Bibek)
  + Ali
    - Have an implementation using the Hi5 repository (HDF5)
      * Have an example of reading and writing a file
      * We are using Hi5 for the thread safety
        + Hi5 is a header only library
  + Shahzrad
    - Identity and Element wise equal primitives
    - Should have ASL implemented soon
  + Parsa
    - Working on creating performance counters for primitives
  + Me
    - I have continued to do a performance comparison with Phylanx and NumPy
      * Found an issue with NumPy on my machine
      * We have every similar timing to NumPy
      * Have pushed these results to the Phylanx data repo
    - Added a slicing primitive
    - Added Doxygen infrastructure
    - Working on a stacking primitive
      * Plan to have a pull request at the end of the week
* Python Bindings
  + Looking into tree transducers
    - As a way of mapping Python to Phylanx
  + Decorators are working now
    - Debuging our python wrapper
      * Issues with strings
      * Hartmut- I fixed this this morning
* Buildbot
  + Hartmut- Is it possible to report the results to GitHub?
    - Pycicle might be something to look at
* Next Meeting: February 1st at 3pmET/2pmCT/1pmMT/12pmPT via Webex