Phylanx Meeting

January 11, 2018

* Ali, Bibek, Chris, Connor, Hartmut, Kate, Katy, Kevin, Rod, Shahrzad, Stefan, Steve
* Chris-
  + tree transducer
    - in process of mapping the data structures and mathematical structure
* Kevin-
  + KNL build is now working with GCC
  + adding another library to make it work (-latomic)
  + problems:
    - two debug tests time out!
      * dot operation
      * multiply operation
  + Working on SOW language to make sure that the work assignment is done clearly.
* Kate-
  + getting Katy up to speed.
  + looking at traces for now since the expression tree data is not available yet.
* Hartmut-
  + focused mainly on refactoring internal node data to avoid excessive copies.
* Python-
  + Now we can use decorators to generate PhySL from pure python code.
  + Add LRA example in Python.
* Algorithms-
  + Compared LRA python version with LRA Phylanx Version
    - Hartmut’s latest changes got rid of the excessive copy issue
    - Our timing is now comparable to the Python version
    - added the results to phylanx\_data repository
  + Updated LRA Python version
    - Added Intercept
    - Testing now possible
    - Need to convert it to PhySL
    - Looking at add solvers from SK Learn to our LRA
      * newton-cg , saga, sag are some options
  + Working on Simple ALS Implementation
    - Python version of the code is ready
    - PhySL version on the way
    - Adding some primitives such as Identity Matrix and element wise comparison
* Tiling
  + Built a linear programming model.