Phylanx Meeting Notes

October 26, 2017

* Adrian, Bibek, Ali, Shahrzad, Rod, Parsa, Kevin, Monil, Stefan
* From Last Week:
  + Bibek- Logistic Regression Algorithm; Migrate Primitive
  + Ali- Write and Read primitives; CSV
  + Rod- Python Bindings
  + Shahrzad- Help Parsa Migrating to Blaze
  + Parsa- I will finish the migration to Blaze
  + Steve- Gateway 17 Conference
  + Hartmut- Will try to finish higher level functions
  + Monil- Work around build problem
  + Kevin- Fix CMake file; Think about SOW
  + Stefan- Work today and tomorrow on our problems; Work on SOW
  + Kate- Install Ravel on Rostam
* Chris-
  + Submitted the SOW and the persons of contact to my business group
    - Will check back in with them in a week
    - Expect payments by January/February timeframe
  + Worked more on the Hilbert Curve
    - Should have a unit test soon
* Kevin-
  + PyBind decided that Power8 Linux was a different path
  + Issues with the Python bindings
    - PDB is failing
    - Seems to be an error in the C++
* Monil-
  + CMake will throw an error if linked to a Static build of Python
  + Continuing to learn about HPX
    - Plan to increase my literacy of APEX as well
* Stefan-
  + I reviewed algorithm literature
    - Approximation algorithms
    - Tried out a few things
* Hartmut-
  + Almost finished with a Phylanx re-write to support higher order functions
    - Hope to merge it today or tomorrow
    - Only facility missing is partial function application
    - Fixed a lot of problems
    - Added several primitives
    - Working on fixing the linear regression model
      * Hope to get this working ASAP
  + Working on a transformation step for the middleware
    - I think the front end and the back end are at least minimally usable
    - Use case: Take an A\*B and transform this into a tiled operation
* Parsa-
  + Still missing two primitives inversion and determinant
    - Just need to tweak the build system
* Shahrzad-
  + Still working on learning HPX
* Rod-
  + Plan on presenting my ideas about how to do the program bindings
  + Started writing the Logistic Regression algorithm in SimPy
* Ali-
  + Had a crash course on Spirit
  + Working on the CSV files
    - Have a pull request that should be done soon
  + Rod- Should we use just one data format under the hood?
    - Hartmut- Sure, but that is orthogonal to this work
* Bibek-
  + Logistic Regression is not working properly at the moment
  + Have begun working on a slicing primitive
* For Next Week:
  + Bibek-
    - Have an implementation of slicing
  + Ali
    - Complete the CSV primitives
    - Work on the reading the rest of the text based formats
  + Rod
    - Prepare talk on Python bindings
  + Parsa-
    - Complete the migration to Blaze
      * Fix inversion and determinant primitives
  + Hartmut-
    - Finish re-write
  + Stefan-
    - Watch Hartmut’s and Rod Presentation
  + Monil-
    - Learn more about HPX and APEX
  + Kevin-
    - Other projects…
  + Chris-
    - Have functional Hilbert Curve implementation
      * Also have Morton orderings available
* Next Meeting: Thursday November 2nd at 3pmET/2pmCT/1pmMT/12pmPT via Webex