Phylanx Meeting

October 5, 2017

* Adrian, Chris, Bibek, Monil, Stephan, Rod, Ali, Kevin, Shahrzad
* Blaze Integration
  + We have decided to use the Blaze library for matrix operations
* Chris-
  + Contacted Klaus Iglberger from Blaze and started working on the space filling curves
    - Wrapped up the changes needed for the document
  + I would like to take the proposal and create a statement of work
    - Send it around
    - Submit to our contract folks
    - Hartmut-
      * The statement of work would be for one year
    - Adrian- Will you be able to provide us with budget numbers
      * Chris- I can get it to you by next week
* Kevin-
  + Buildbot server is up
    - Currently only the host is building correctly
    - Adrian- Would you be able to explain the names of the builders?
      * Kevin- I am thinking of re-naming them
  + JeMalloc library does not work
    - System Allocator and TcMalloc work fine
    - JeMalloc does not like the thread local storage
  + Planning to change the dependencies so that HPX and PyBind
* Monil-
  + Working on understanding HPX
* Stephan-
  + Looked at the background material on the Wiki
* Hartmut-
  + At CppCon last week
    - My talk should go up soon
  + Had a conversation with Klaus Iglberger
    - Author of Blaze
    - Decided to move from Eigen to Blaze
      * Parsa will be guiding that process
  + Working on unifying the API for the primitives
  + Chris- Would it be ok if some of our customers write some Spartan algorithms
    - Hartmut- Absolutely, it pushes us forward
  + I created a primitive which returns an optional value
* Parsa-
  + Worked more on the primitives
    - Test are still not passing
  + Working on Blaze integration
    - Added it to CMake
      * But it doesn’t work on Rostam
    - Working on serialization
  + I will finish reading the proposal today
* Shahrzad-
  + Getting familiar with HPX
* Rod-
  + No update
  + Added Blaze to CircleCI
* Ali
  + Installed Blaze on Rostam
  + Got the multiply primitive into repo
  + Working on primitive store
* Bibek-
  + Implemented the exponential primitive
  + Rod and I realized that we will need for loops and conditionals
* Advertising
* For Next Week-
  + Bibek-
    - Sit with Rod and finalize the primitives
    - Choose one to implement
  + Ali-
    - Finish store primitive
    - Choose another
  + Rod-
    - Work on a new primitive
  + Parsa-
    - Migration to Blaze
      * Adrian- please pick a sub point
      * Parsa- The whole checklist
        + Will buy Adrian a beer (something) if this is not finished
  + Hartmut-
    - Finish primitive refactoring
    - HPX work
  + Stephan-
    - Read more literature of matrix multiplications
  + Monil-
    - Finish tutorial on STE||AR Page
  + Kevin-
    - Focus on the proposal
  + Chris-
    - Review the proposal
      * Adrian- Let Chris know that the proposal is ready to be consumed
  + Adrian-
    - Work on If statement