Phylanx Meeting

September 14, 2017

* Adrian, Hartmut, Stephan, Chris, Kevin, Steve, Rod, Ali, Bibek, Parsa
* Chris-
  + I have not been able to get into contact with Almadena
    - Kevin- Should I assume that we will receive about the same amount that we originally budgeted for?
      * Yes
  + Unsolicited over $300,000 requires more review
  + Started to work with SimPy
    - Looking into wrapping the types that Hartmut has exposed to work with SimPy
      * SimPy will provide some optimizations
* Kevin-
  + Monil starts next week
    - But I will be out
  + Starting to build Phylanx on different platforms
  + Seeing some issues with Clang 5 and Boost 1.65
    - Power PC
    - Adrian- this seems to be working on buildbot
  + Adrian- Will Monil be working on the Buildbot?
    - Yes, he will be working on it soon
* Kate-
  + Looked at the proposal
    - Added a section for Ravel
* Stephan-
  + Rough week… not much to report
* Steve-
  + I was able to compile the repo
* Hartmut-
  + We have everything in place to start building expression evaluation chains
    - Phylanx will take a string expression, which when evaluated will provide the solution you are looking for
  + Chris should we look at other primitives?
    - Adrian- Lets focus on what it takes to get ALS working first
    - Should we think about a dot-product explicitly or should we implement an AST version
      * Hartmut- Possibly, it could be either
* Parsa-
  + Nothing to report
* Bibek-
  + I created a basic implementation of the Logistic Regression Application in Python
* Ali-
  + Got everything working on my machine and on Rostam
* Rod-
  + Got the CircleCI set up for the repo
  + Checked the compilation of the project with different compilers
  + Looking into Pybind11
    - Use Pybind11 to take the parsed AST and perform optimizations
      * Spit out an optimized AST which then is matched and executed
* Primitives
  + LSU students should pick a primitive and implement it
    - Prove a test with the implementation
* Monthly Reports
  + Chris providing monthly updates would be helpful
* Hi-Hat
  + Hartmut- Not a fan
* Meta-Classes
  + Hartmut- We are not sure how this is developing
    - They are definitely could be useful
    - Herb Sutter would be willing to use test cases we provide
      * Gave us access to the code
    - Chris- Would you be able to introduce me to Herb
      * Hartmut- Sure
* Proposal-
  + We will have to wait to cover the budget
  + We should write a cohesive narrative that will cover all of the work we did
    - Cut out pieces to match the budget for each year
  + Adrian- I think we should sharpen the project narrative with Chris’ vision
    - Kevin- I concur
    - Kate- It does read pretty well
  + Kate- What HPX issues need attention from Ravel
    - Critical Path Analysis
    - Viewing task dependencies which cause Seg. Faults and hangs
  + We will have a finished narrative in two weeks
* Next Meeting- Thursday September 21st at 2pmCT/3pmET/12pmPT via Webex