

Project Proposal for Parallel Functional Programming

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Project Name: Parallel Map Reduce in Haskell

Description:

The main goal is to implement a map reduce application which runs on multi processors. One easy example can be word count using map reduce. The module including split the input file into several partitions and running map on it. After that we do a reduce on the output of map, finally we merge the result. All the tasks can be spliced well and assign to different cores.

I'm trying to build an abstract map reduce module. The baseline of this project is to implement a map reduce word count and test its performance comparing to non-parallel word count. I will also try other application suitable for map reduce if time permitted.