

**CS 791v: Topics: Parallel Computing**

**Spring 2015**

**Programming Assignment 2**

**Vector Reduce**

**Assigned Date**

1/29/2015

**Due Date**

2/5/2015

**Overview**

* For this assignment, you will start with a vector and then sum all of the elements of that vector.
  + Warp wise reduction
  + Block wise reduction
  + Then reduction across blocks.
  + You will have to use barriers at the appropriate place

**Project Requirements**

* 2 versions of the code:
  + A compiled and running sequential C program
  + A compiled and running CUDA program
* Multiple timings of runs of various sizes.
* Appropriate graphs

**Deliverables**

* Bring output to class for discussion on the day the project is due.
* Have a pdf of your writeup and a zip of your source code emailed to Fred Harris and Lee Barford (DO NOT send binaries).
  + Firstname dot Lastname at … (Fred is cse, Lee is gmail)
  + Subject: CS791v-PA2
  + 1 message – 2 attachments (pdf and zip)