## Homework Assignment One CPSC 547: Software Measurement

Due: before 11:59 pm on Oct. 20, 2014

Please email your solutions to class grader at pavankumar@csu.fullerton.edu and CC them to me at bcong@fullerton.edu.

(20 pts)

**Problem 1: (4 pts):** Identify 2 public websites that contain useful info on Software Measurement. Briefly describe the info provided in each site and how they may help you in this class (for example, project) or in your work.

## **Problem 2: (4 pts)** Page 47 of the textbook states:

"This data is used by the engineers to assess progress and to determine and guide improvement actions. This serves as one example of how data can be obtained from a defined process designed to motivate personal process improvement."

Choose 2 measures defined on page 48 to show how they are used to assess progress and guide improvement actions.

**Problem 3: (4 pts)** A commonly used software quality measure in industry is the number of known errors per thousand lines of product source code. What are the possible problems with relying on this measure as the sole expression of software quality? What other measures you may want to use to objectively assess the quality of the software quality and **why**?

**Problem 4: (8 pts):** Consider the defect measure defined on Page 33 (Figure 2.10), please define the *collection and verification procedure* for this measure. Please justify that your procedure ensures the data collected satisfy the four criteria defined in Section 3.3 of the textbook (Page 49 – 51).