

**CSC 509 Assignment 4:**  
**Read a Seminal Paper, Discuss It in Class,**  
**and Answer a Couple Questions about It**

*Revised 4 May*

**DUE:**

- *Reading completed by 2pm Monday 5 May*
- *Answer to the questions posted on the 509 PolyLearn Wiki by 11:59pm Wednesday 7 May*

**Assignment Reading**

Do a first and second pass read of the following paper and be prepared to participate in a class discussion during lecture time on Monday 5 May:

"Software unit test coverage and adequacy", Hong Zhu, Patrick A. V. Hall, John H. R. May, December 1997,  
**Computing Surveys (CSUR) , Volume 29 Issue 4**

The paper is available at the ACM digital library, the most direct access to it being a search by the full text of its title.

While the paper is going on 20 years old, it still has much information that is relevant today. It also has the highest ACM Computer Surveys citation count of any paper on functional software testing, where "functional" means direct testing of the software code as distinct from pure HCI testing of functionality or usability.

Before, during, or after our Monday class discussion, post your answers to the questions below to the Assignment 4 Section of the 509 PolyLearn wiki. Please post these comments per the instructions on the wiki no later than 11:59pm Wednesday 7 May.

**Assignment Questions**

Here are the two questions to answer for this assignment. Your answers need not be more than a paragraph or two per question, but you should do some earnest thinking about them. Your answers can be longer if you like.

**Question 1:** *In reading the paper, what if anything have you learned that may be valuable for the kinds software you may develop in the future, either for your remaining classes at Poly or in other future places of employment or further graduate study?*

**Question 2:** *In reading the paper, what if anything have you learned that may be valuable for the specific project you're working on for 509 this quarter?*

You'll note of course that both questions have an "if anything" clause, which means that your answer could be "I haven't learned anything". If this is your answer, you can't just leave it at that, however. You must say at least a few sentences about *why* you haven't learned anything.

You'll also note that everyone can see everyone else's answers. So if you feel the urge, you can "cheat" by waiting until you see someone else's answer(s) that you like and copy those. That of course misses the point about the assignment, which is for you to read the paper and reflect on what you got out of it.

As noted above, please post your answers to the PolyLearn wiki by Wednesday 7 May.