# Reading Questions 3

CMU 17-654/17-754: Analysis of Software Artifacts
Jonathan Aldrich (`jonathan.aldrich@cs.cmu.edu`)

Due: Tuesday, April 5, 2005 (10:30 am)

10 points total

**Readings:**

- Thomas Ball. A Theory of Predicate-Complete Test Coverage and Generation.

- Paul Luo Li. Predicting field problems using metrics based models: a survey of current research. Sections 1-4.

*Note: When answering these weekly reading assignment questions be concise. It is expected that each question set can be answered adequately in a page of text or less. Rambling answers with irrelevant detail will not be received warmly. On the other hand, answers should contain enough detail to understand clearly what you are saying. Good English grammar and syntax is important, as always.*

*Questions:*

- Give a short evaluation of Ball's predicate coverage criterion: If you were leading a project, what reasons would you give to use or not use this coverage criteria in evaluating your test suite?

- Describe a situation in which it may not be possible to take a time based modeling approach.

- Describe a situation in which it may not be possible to take a metrics based modeling approach.

  Hint: Think about what information is required to construct a metrics based model and a situation in which the required information is not available.