CMSC 735
Assignment 1

September 24, 2001
(Due: October 8, 2001)

This is a class project that should end up as a product on the web site before the semester is over. The product is an annotated set of references for empirical software engineering.

The first part of the project is to generate a bibliography of empirical software engineering papers. Each student is expected to identify papers in the literature. Each student will be assigned a particular journal or set of conference proceedings, or set of years of a particular journal or conference proceedings.

A small team will be responsible for coordinating the effort, i.e., assigning sources and years, compiling a unique list of papers, etc. After the list is compiled (by October 1), they will assign to each student 3 papers to read, review and write an annotated abstract.

The literature search is for any empirical studies in any area of models and metrics (resources, defects, processes, products, ...) or any experiments or case studies that have been run. You should look at recent studies in the IEEE Transactions on Software Engineering, IEEE Software Magazine, IEEE Computer Magazine, the Journal of Systems and Software, the International Journal of Empirical Software Engineering, ACM Transactions on Software Engineering and Methodology, Communications of the ACM, the International Conference on Software Engineering, the International Conference on Software Maintenance, the International Conference on Software Reuse, the Symposium on Software Metrics. You may also seek out other possible publications such as company journals, such as the IBM Systems Journal.

For each paper you are assigned, write an abstract that defines the entity being studied (i.e., the process, product, model, metric, ...), the attributes of the entities that are of interest. You state the purpose of the study, i.e., whether the study is aimed at characterizing, understanding, evaluating, predicting, or improving. You should also say to whom the study should be of value, i.e., a researcher, project manager, corporation, ... and what the context of the study is, e.g., if it is in a company, the relevant characteristics of the company, if it is a class project the assumed background of the participants.

Note whatever information is important to understand the model or metric, e.g., certain definitions, environmental characteristics, information about process conformance, underlying models, etc. Each abstract should be between 250 and 300 words.

The abstracts should be sent to the organizing team who will do a last edit and then include the write-up in the Annotated Bibliography on the ftp site. We will return to this assignment again, later in the semester, to improve the abstracts for the final product.