

SE4831 Current Topic Research Assignments

Dr. Walter Schilling

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1 Introduction

In lieu of a formal research paper, SE4831 will rely upon a set of article reviews. In short, over the course of this quarter, you will be tasked with selecting 3 articles from a set of online sources. You will then be responsible for reading the article and preparing an article summary. The article summaries will be submitted via the course website.

2 Summary Content

The summaries should be approximately one and one half pages, and should highlight the material contained within the article. In specific, you should address what was discussed in the article or podcast, what you learned from the article, how this material will help you in your software development, and what questions you may have developed from reading this article.

In addition to the written text, the summary shall clearly delineate the name of the article, its date, and other relevant bibliographic information.

3 Details

Overall, you are required to summarize three artifacts. The materials are to come from three different sources, and the topic should be related to software quality. Applicable topics include:

- Software Metrics
- Software Verification
- Software Validation
- Static Analysis and Model Checking
- Software Process Improvement
- Software Inspections
- Defect Tracking and Analysis
- Any item deemed related to software quality

One article must be from IEEE Software (<http://www.computer.org/portal/web/software/home>) or IT Professional magazines (<http://www.computer.org/portal/web/itpro>). These are flagship publications of the IEEE Computer Society, one of the leading societies dealing with Software Engineering. You must select one article from this publication to review and summarize.

In addition to current security trends, it is also important to read on some of the experimental aspects of software security. To fulfill this obligation, one article must come from from the IEEE Transactions on Software Engineering (<http://www.computer.org/portal/web/tse>). This journal publishes some of the most current and advanced research in the area of software engineering.

One article being reviewed must come from a conference proceeding. IEEE has several applicable conferences, including:

- International Conference on Software Testing, Verification and Validation <http://icst2012.soccerlab.polymtl.ca/Content/home/index.php?language=english>
- IEEE International Symposium on Software Reliability Engineering <http://2011.issre.net/content/about-issre>
- International Conference on Quality Software (<http://www.computer.org/csdl/proceedings/qsic/index.html>)

However, there may also be other applicable conferences within IEEE that can be used as well. Conference articles from this publication are available through our library subscription to the IEEE digital library. You must select one article from one of the conferences to review and summarize.

4 Due Dates

Overall, three submissions must be made. To avoid all reviews being completed in week 10, the following interim due dates have been assigned:

Week	Date	Time	Material
7	January 24, 2012	23:00	The second article review
8	January 31, 2012	23:00	The third article review
10	February 14, 2012	23:00	The fourth article review

The specific sequence and order of articles is up to you. However, once an article has been reviewed, it is no longer available for a second person to review the article or podcast. Thus, it might be to your advantage to start early if there are articles that you are really interested in. And, it is certainly permitted to turn in articles early.

Article reviews are to be uploaded to the course website.

Ungraded reviews will also be placed on the course website in a matrix so that it is possible to determine if an article has already been reviewed or may have relevance to another article.