

# *Possible Software Engineering II Class Projects*

For the project report, please use the templates from IEEE publications site. Please use IEEE style for the references

<http://www.ieee.org/web/publications/authors/transjnl/index.html>

**NOTE** If you would like to propose your own project, please provide 1 page summary of the proposed project. The project proposals must be turned in to the instructor no later than 03/24/2010.

## **Project 1: Software Automation Tools**

Select three automated software estimation tools to use. You can find them on the web with a demo version or short time period licenses.

- (a) Determine the types of algorithms each of them use
- (b) Review the tools you selected and provide critique for each of them (pros/cons, improvements if any) and order them according to your preference.

## **Project 2: Software Configuration Management (SCM) Tools**

SCM tools are essential for the software development. Your job is to survey the current, most widely used SCM tools and provide comparison studies between different tools (similarities and differences). Feel free to include both academic and commercially available tools. You must have at least 9 tools in the survey.

## **Project 3: Software Testing Tools**

There are several software testing tools available to use during and after the software development. Your job is to survey the current, most widely used software testing tools and provide comparison studies between different tools (similarities and differences). Feel free to include both academic and commercially available tools. You must have at least 9 tools in the survey.

## **Project 4: Software Project Management Tools**

Software project management tools are essential for the software development. Your job is to survey the current, most widely used SPM tools and provide comparison studies between different tools (similarities and differences). Feel free to include both academic and commercially available tools. You must have at least 9 tools in the survey.

## **Project 5: Software Maintenance Tools**

Software maintenance tools are essential for the evolution of the software. Your job is to survey the current, most widely used software maintenance tools and provide comparison studies between different tools (similarities and differences). Feel free to include both academic and commercially available tools. You must have at least 9 tools in the survey.

## **Project 6: Agile software development methodologies**

Agile development is becoming more widely used both amongst the academia and software industry. However, there are still many unanswered questions. Your job is to survey the current research initiatives and provide comparison studies between different methodologies (similarities and differences). You must have at least 9 methodologies in the survey.