Case Study Research in Software Engineering

Coordinator: Professor Claes Wohlin, Blekinge Institute of Technology, Sweden

Date: Wednesday September 19th 2007
URL: http://www.esem-conferences.org/iasese2007.php
Location: Madrid, Spain.
Part of the **2007 Experimental Software Engineering Week**.
See: http://www.esem-conferences.org/

Registration Dates and Costs:

Early	15th August 2007	**Cost**	200 Euros
Late	12th September 2007	**Cost**	250 Euros

Early registrants will be sent materials in advance of the school to enable full preparation.

Audience:
The goal of the International Advanced School on Empirical Software Engineering (IASESE) is to provide attendees with the opportunity to learn and practice advanced empirical software engineering techniques from leaders in the empirical software engineering community. This course will be of interest both to researchers who are interested in learning how to add empirical evaluation to their research and to researchers interested in deepening their knowledge and skills in empirical research. Basic concepts of experiment design and software engineering measurement will *not* be covered.

Applications:
http://www.esem-conferences.org/iasese2007.php

Preliminary Program

9.00-10.30 Introduction to Case Study Research

Lecturer: Professor Per Runeson. Lund University, Sweden

Abstract: Case studies offer the opportunity to conduct empirical studies in software engineering, where success or failure depends on many interrelated factors. This complex interaction cannot be fully studied in isolation, but needs empirical studies in real world settings. However, a study conducted and reported as a success story by a biased participant in a project, does not fulfill the criteria of solid independent research.
This introduction aims firstly at presenting definitions related to case study research, e.g. fixed vs. flexible designs, qualitative and quantitative approaches, and level of control. Secondly, it provides an overview of methodological support to guide planning and running case studies that fulfill scientific criteria of good research: a case study process, procedures for data collection and analysis, validity analysis and countermeasures.

Material: Copies of slides

10.30-11.00 Coffee Break

11.00-12.30 Checklists for Case Study Publications in Software Engineering

Introduction: Dr. Martin Höst, Lund University, Sweden

Tutors:
Dr. Martin Höst, Lund University, Sweden
Professor Per Runeson, Lund University, Sweden
Professor Claes Wohlin, Blekinge Institute of Technology, Sweden
More tutors may be added based on the number of participants.

Abstract: A checklist for writing and hence for reviewing case studies in software engineering will be presented. Then, the participants will be divided into groups and jointly use the checklist. The groups are expected to use this checklist to review a set of case study papers in software engineering. The objective of session is threefold. First, the aim is that the participants should learn how to structure and write case study papers based on using the checklist to review papers. Secondly, the checklist should provide support in the review process and hence in valuing published case studies. Thirdly, the intention is that the groups should propose improvements to the checklist.

Material: Checklist and a set of case study papers

Preparations: You may be asked to perform some preparations before the school. More information will be published at a later stage.

12.30-13.30 Lunch Break

13.30-14.00 Summary of Results from Group Work

Abstract: The groups should discuss their findings internally and agree on the major comments on the assigned papers and improvements to the checklist.

14.00-15.00 Presentation of Group Work

Abstract: The groups should present their findings for each other. The session will end with a discussion about key issues to write case study papers in software engineering.

15.00-15.30 Coffee Break

15.30-17.00 Aggregation of Case Studies

Lecturer: Professor Claes Wohlin, Blekinge Institute of Technology, Sweden

Abstract: This session discusses aggregation of case studies. The discussion includes an introduction of a specific method called the case study survey method. The presentation will discuss challenges in combining results from individual studies. Furthermore, the intention is to connect the possibility to aggregate results with the use of checklist for individual studies. The presentation will end with a discussion of how the importance to create value by aggregating results from individual case studies in order to have an impact on both software engineering research and industry practice.

Material: Copies of slides