



1st International Workshop on Design Pattern Theory and Practice (IWDPTP)

Important Dates

Submission: 22/08/05
Workshop: 25/09/05
(morning)

Location

Hotel Margitsziget
Budapest, Hungary
part of STEP'05
along Vissoft'05
before ICSM'05

Committee

Workshop, program chairs:

- Giuliano Antoniol
Sannio, Italy
antoniol@ieee.org
- Yann-Gaël Guéhéneuc
Montreal, Canada
guehene@iro.umontreal.ca

Committee members:

- Hervé Albin-Amiot
Nantes, France
- Pierre Cointe
Nantes, France
- Stéphane Ducasse
Annecy, France
- Kim Mens
Louvain-la-neuve,
Belgium
- Houari Sahraoui
Montreal, Canada
- Roel Wuyts
Brussels, Belgium

URLs

Website:

ptidej
.iro.umontreal.ca/
organisations/iwdptp

Bulletin boards:

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bboards

Introduction

The workshop is a **half-day event with 10 to 15 participants**. It is part of the 3rd IEEE Software Technology and Engineering Practice workshop series (STEP 2005), held in conjunction with Vissoft'05, just before ICSM'05. The main goal of the workshop is **to define open practical problems in the field of software engineering related to design patterns, to devise a theory to solve these problems, and to foster interaction among the international community**.

Background

Design patterns have been a major trend in software engineering since their introduction in the software engineering community around 1995. They have been the subjects of many research contributions on their writing, on their instantiation, and on their identification. However, the reason **why** design patterns are so much acclaimed, so easily adopted, and so widely used are not yet explained clearly.

Main Theme and Goals

The main theme of the workshop is to understand and to define the foundations for a first theory on why design patterns work (or do not work) in practice. Only a deeper and better **understanding of the mechanisms at play when using design patterns** can help software engineering in proposing adequate process, techniques, and tools for design patterns. This understanding shall help in setting a framework for the **rigorous and systematic study of program understanding**. This understanding would also help in **predicting when and how design patterns can be used successfully**.

The workshop will address the following issues:

- Design patterns and software quality
- Models to model design patterns
- Design pattern maintainability
- Design pattern evolvability
- Recovery of design patterns
- Design pattern visualization
- Design patterns and new technologies (production lines, frameworks...)

The goals of the workshop are to define:

- A clear terminology
- A theory of *why* design patterns work
- Potential issues with design pattern adoption, evolution, and maintenance
- Key research problems faced by tools/approaches for design patterns
- A foundation of materials for future research on design patterns

as well as to facilitate the exchange of ideas and interactions among international researchers.

Workshop Organization

The workshop is a two-session half-day event, held as a working event to facilitate discussions and disseminations of ideas.

Prior to the workshop, participants are required to read other participants' submissions and to answer two–three questions devised by the program committee members on the relationships of their submission with other submissions.

The first session starts with a participant (or a program committee member) summarizing all the submissions in one consistent framework, relating questions, open issues, and solutions with one another. Then, each participant has eight to ten minutes to introduce herself and to present her ideas, including three main points and a question/issue to stimulate the discussions. The second session is devoted to discussions addressing the questions and problems posed by the participants.

A working document shall be created and posted on the website to chronicle the discussions and findings. Discussions shall continue through a mailing list and a forum. Possibly, workshop participants will be solicited to submit full paper versions for inclusion in the STEP post-conference proceedings.

Participants' Profiles

We invite people with practical experience and knowledge of design patterns to gather and to report **successful and less successful stories** with the aim of devising a first theory on design patterns. People interested in the **foundations of software engineering, program understanding, and design patterns** are all welcome