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Second International Workshop on Maturity of Web Engineering Practices (MATWEP 2019)

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Abstract. Knowledge transfer and adoption of software engineering approaches by practitioners is always a challenge for both, academia and industry. The objective of the workshop MATWEP is to provide an open discussion space that combines solid theory work with practical on-the-field experience in the Web Engineering area. The topics covered are knowledge transfer of Web Engineering approaches, such as methods, techniques and tools in all phases of the development lifecycle of Web applications. We report on the papers presented in the edition 2019 and the fruitful discussion on these topics.

Keywords: Web engineering • Knowledge transfer • Industrial environment

1 Introduction and Motivation

The second International Workshop on Maturity of Web Engineering Practices (MATWEP 2019) was held in conjunction with the 19th International Conference on Web Engineering (ICWE 2019) in Daejeon (Korea) on June 11th, 2019. The motivation of this initiative stands in the aim of building a better bridge from the theory to the practice; from academia to industry.

The focus of this second workshop and future editions of MATWEP are the analysis and discussion on positive experiences and difficulties that arise in the construction of such bridges. The goal is to show the lessons learned in the knowledge transfer process. This way it promotes to obtain feedback from practitioners for improving Web Engineering techniques, methods and approaches developed in research-intensive environments.
2 Presentations and Discussion

During the second edition of the workshop five papers have been selected for presentations at the workshop; two of them have been selected to be published in these proceedings. We hope you find these papers useful reading material.

The first paper written by Gefei Zhang and Jianjun Zhao presents a white-box method for separating user interactions from each other. Thanks to the separated interactions, the method proposed by the authors helps to achieve a better understanding the control and data flow of AngularJS-based single web applications, providing a novel test criterion. Authors present a running example which is the core of the case study described. Finally, authors plan to extend the analysis by more AngularJS directives such as ng-repeat and $watch.

The second paper written by In-Young Ko, KyeongDeok Baek, Jung-Hyun Kwon, Hernan Lira, and HyeongChul Moon, present a framework to test and verify the reliability and safety of cyber physical system (CPS) applications in the perspectives of cyber physical system environments and users. This framework includes a metric and an algorithm for testing and choosing the most effective services that can deliver effects from their associated physical devices to users. In addition, it provides a computational model to test whether a CPS application may cause a cognitive depletion or contention problems for users.

For further information and material, such as the slides of the presentations, please visit the website of MATWEP 2019: http://www.iwt2.org/matwep2019/.

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