

Editorial introduction

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In this thematically cohesive issue, we first finish up the Special Multi-issue begun last year on Selected Areas in Automated Software Engineering, guest edited by Menzies and Pasareanu, with three more excellent articles relating to analysis and debugging. And, while not a part of the special multi-issue, we also include another paper received via the Journal's main editorial stream which is also related to debugging.

From the Special Multi-issue

- Bissyande, Reveillere, Lawall, and Muller present “Ahead of time Static Analysis for Automatic Generation of Debugging Interfaces to the Linux Kernel,” in which they describe an approach to automatically generating a debugging interface for the Linux kernel. This interface can record information during testing that is retained and useful across crashes and hangs.
- In “Diversity Maximization Speedup for Localizing Faults in Single-Fault and Multi-Fault Programs”, Xia, Gong, Le, Lo, Jiang, and Zhang present a method for ordering a set of unlabeled test cases, called Diversity Maximization Speedup, in order to increase the effectiveness of fault localization. This reduces the test case labeling effort of developers using the fault localization tool.
- In “Differential Precondition Checking: A Language-Independent, Reusable Analysis for Refactoring Engines,” Overbey, Johnson, and Hafiz explain a new reusable and language independent analysis that supports refactoring.

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Regular submission

- Jannach and Schmitz present an approach to debugging of spreadsheet programs in “Model-based diagnosis of spreadsheet programs: a constraint-based debugging approach”. They apply their tool to a significant scalability case study.

You are invited, as always, to email me at *Bob.ASEJ@gmail.com* with your thoughts on this issue or the Journal in general.