

5th International Workshop on Quantitative Approaches to Software Quality

Key Note Speaker

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Pitfalls and Countermeasures in Software Quality Measurements and Evaluations

Abstract

This talk addresses common pitfalls and their countermeasures in software quality measurements and evaluations based on research and practical achievements at the Global Software Engineering Laboratory, Waseda University in collaboration with many software companies. The pitfalls include negative Hawthorne effects, organization misalignment, uncertain future, and self-certified quality.

Corresponding countermeasures include goal-oriented multidimensional measurements, alignment visualization and exhaustive identification of rationales, prediction incorporating uncertainty and machine learning-based measurement improvement, and standard/pattern-based evaluation.