

Title / Titel

## Results of a four-year experiment comparing MDD with TDD

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Speaker(s) / Referent(s)

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To whom is the presentation addressed? / An wen richtet sich der Beitrag?

software developers, project managers, agile developers

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Keywords / Stichwörter

MDD, TDD, comparison, design quality

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Abstract / Zusammenfassung

One of the few things a university can do that industry cannot is to repeat the same project several times. This paper presents the results of a four-year experiment in which graduate students developed a small program either using Model-Driven Development (a top-down, traditional approach) or Test-Driven Development (a bottom-up, agile approach). The students had between two and thirty years of industrial experience, and each student could choose the approach (MDD or TDD) and programming language/environment.

One of the primary questions was to investigate the assertion of the agile programming community that test-driven development with conscientious refactoring yields a good design. This only happened in a very few instances. The study also compares measurable items such as reported effort, number of test cases, and code size.

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Biography / Biografie

Since 1988, Professor Jorgensen has taught software engineering in the School of Computing and Information Systems at Grand Valley State University in Allendale, Michigan, USA. His teaching and research is grounded in twenty years of software development for telephone switching systems. He is also the author of Software Testing—A Craftsman's Approach, Third Edition and Modeling Software Behavior—A Craftsman's Approach. Prof. Jorgensen has been associated with the ISTQB since early 2006, and is a member of the ASTQB. He actively participated in the syllabus for the Advanced Level certification, and the associated glossary.

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