

特別講演のご案内

日時: 平成26年6月23日(月) 13:00~14:30

場所: 情報工学部 大学院セミナー室7F

講師: Dr. Stephan Eggersgluss

Senior Researcher, German Research Center for Artificial Intelligence
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講演題目:

Advanced Techniques for ATPG based on Boolean Satisfiability for High Quality Test Generation

The complexity of digital circuits increases with every new generation of chips challenging particularly verification and test techniques. Currently, tools for Automatic Test Pattern Generation (ATPG) have difficulties to cope with the increased complexity. The challenges include the generation of a test set which has a high fault/test coverage to ensure high test quality and a low pattern count for low test costs. However, classical structural ATPG algorithms have problems especially with hard problem instances. On the other hand, ATPG based on Boolean Satisfiability (SAT) is especially suited to cope with hard problems. This talk presents the basics of formal SAT solving and SAT-based ATPG. Furthermore, it will show advanced techniques how the robustness of SAT-based algorithms can be leveraged to obtain a highly compact test set for regular fault models as well for low-power testing.

連絡先: 温暁青

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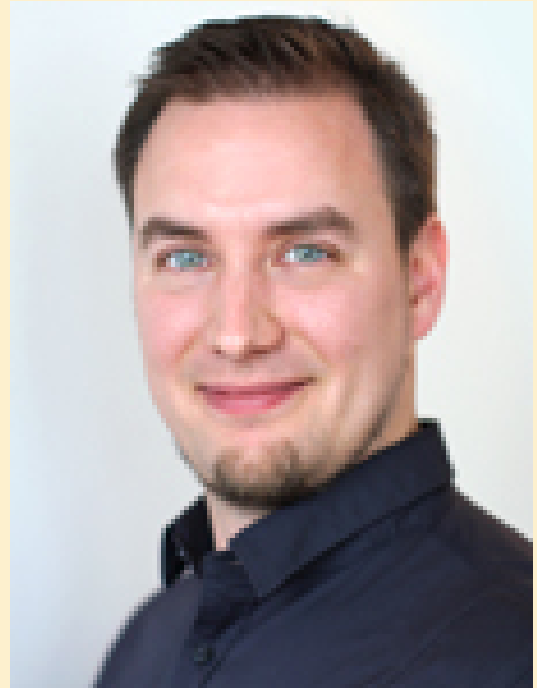
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講師プロフィール

Dr. Stephan Eggersgluss



Stephan Eggersgluss received his diploma 2006 and his doctor degree 2010 from the University of Bremen, Germany. In 2006, he was also with the DFT group of Philips Semiconductors, Hamburg, Germany. He is now a Senior Researcher at the German Research Center for Artificial Intelligence as well as an Independent Post-Doctoral Researcher at the University of Bremen. His dissertation was awarded with the IEEE TTTC E.J. McCluskey Best Doctoral Thesis Award 2010 at ITC as well as the EDAA Outstanding Dissertation Award 2011 at DATE. In 2013, he received the ACM/IEEE McCalla Best Paper Award at ICCAD. His Research interests include Test Generation and Formal solving techniques.