Compositional Variability Models for Test Generation in Scenario-based Testing
Projektgruppe “Praxis der Forschung"
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1 Projekt
ScENARIO-BASED TESTING IS CONSIDERED STATE-OF-THE-ART FOR VERIFYING AND VALIDATING ADVANCED DRIVER ASSISTANCE SYSTEMS AND AUTOMATED DRIVING SYSTEMS. COMBINATORIAL SCENARIO GENERATION TECHNIQUES MODEL AN OVERALL SCENARIO SPACE AND SELECT A SUBSET TO PRACTICALLY PERFORM SCENARIO-BASED TESTING. FEATURE MODELS ARE USED AS A FORMALISM TO MODEL THE OVERALL SCENARIO SPACE. IN THIS “PRAXIS DER FORSCHUNG”-PROJECT, WE AIM TO TAILOR THE SPACE OF POSSIBLE SCENARIOS TO THE SYSTEM UNDER TESTS’ FUNCTIONALITY USING MULTI FEATURE MODELS. WE ANALYZE CURRENT LITERATURE, DEVELOP, AND EVALUATE A NOVEL FEATURE MODEL STRUCTURE THAT CAN BE USED TO COMPOSE POSSIBLE SCENARIO SPACES THAT ARE RELEVANT FOR TESTING SPECIFIC SYSTEMS UNDER TESTS BY REUSING PRE-DEFINE SUB-SCENARIO SPACES.

2 Kontakt
Lukas Birkemeyer (lukas.birkemeyer@kit.edu)