

# Test framework and key challenges for virtual verification of automated vehicles: the VeriCAV project

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**Abstract** : Virtual simulation is considered a crucial step in assuring the safety of highly automated vehicles. Significant challenges however remain in producing valid evidence of real-world system performance from virtual simulation and doing so in a robust, efficient manner. A system architecture for virtual verification of highly automated vehicles is implemented in the VeriCAV project and described here, with a focus on the interfaces between system elements. The framework includes elements for test generation and assessment, virtual simulation, realistic virtual actors as well as the automated driving system being tested.

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