Comparing the Applicability of Complexity Measurements for Simulink Models during Integration Testing

An Industrial Case Study

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Motivation & Research Question

• How to assess complexity and maintainability in the context of automotive model-based software?

• What knowledge can be elicited from the experts?
Outcomes

• Experts in industry:
  – agree on basic ideas behind the metrics
  – rate Block Count (size) metric highest

• More effort required on finding an applicable metric

• Studied metrics don’t correlation in the context
Some thoughts...

• Metrics for model-based software vs. metrics for architectural models?

• How important/valuable are the opinions of experts compared to the assessment of their thoughts and behavior?