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# Analyzing Software Architecture Descriptions to Generate System-level Tests

**Aynur Abdurazik, Zhenyi Jin, Jeff Offutt, Liz White**

**Software Engineering Research Lab**

**George Mason University**

**Fairfax, Virginia USA**

**[www.ise.gmu.edu/SERL/](http://www.ise.gmu.edu/SERL/)**

**{ofut,aynur}@ise.gmu.edu**

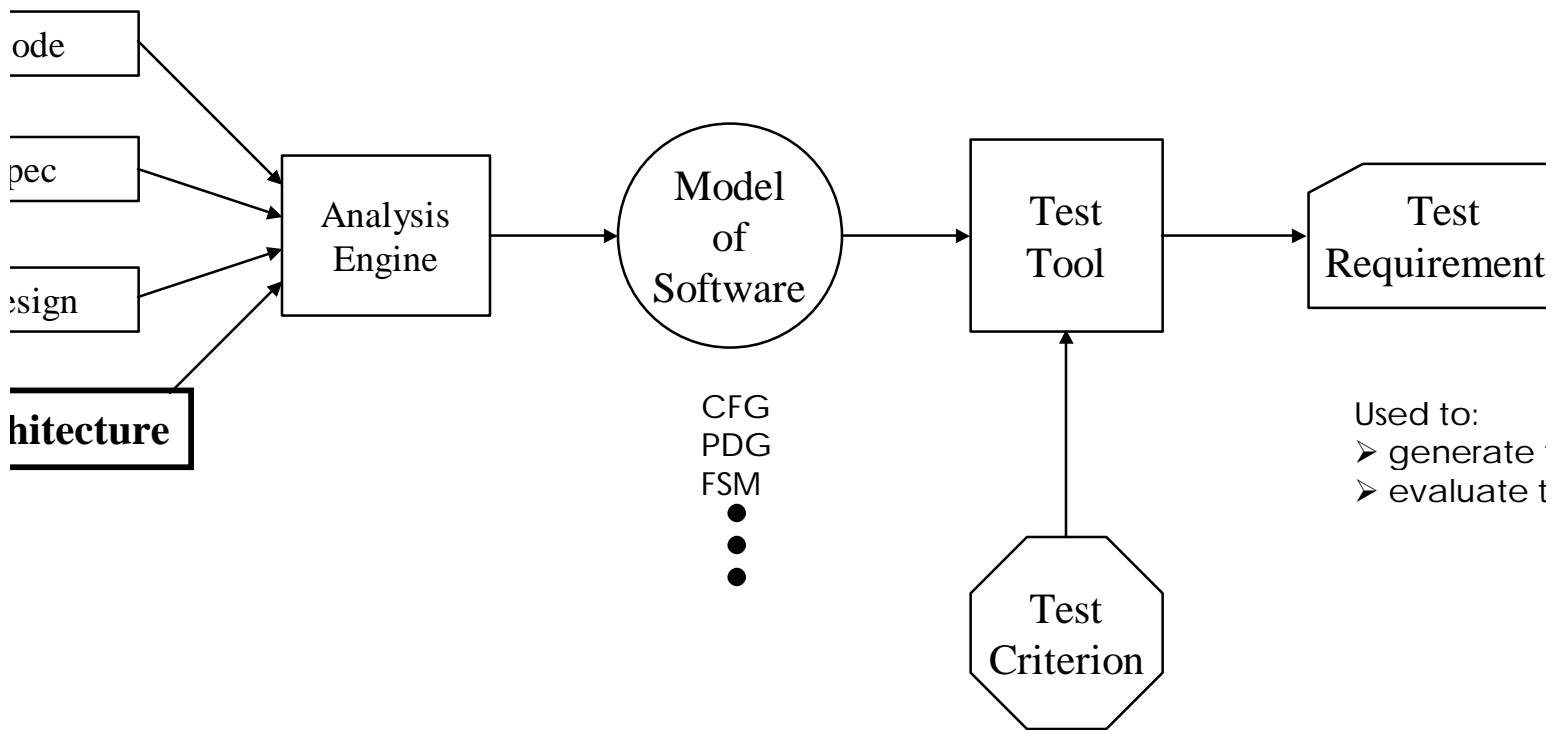
**white@cs.gmu.edu**

**jjin@sed.stel.com**

*Support from NSF is greatly appreciated.*

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# General Testing Process



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# Test Criteria

**Formal test criteria provide rules for deciding whether software has been adequately tested.**

- **Define explicit test requirements (e.g., covering branches)**
- **Assess the quality of test cases**
- **Stopping rules for testing**
- **Repeatability in testing**

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# **Aspects of Architectures to Test**

- | Correct implementation of individual connectors**
- | Correct use of interfaces by components**
- | Adequate solution of the problem by the configuration**
- | Correct interactions among the components and connections**
- | Correct application of the architectural style**