

Systems, Methods and Apparatus for Automata Learning in Generation of Scenario-Based Requirements in System Development

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DESCRIPTION

This technology is a software system generating program-storage medium for use in robot operations. The medium has a set of instructions for generating a scenario that describes requirements of a software system in reference to automata-learning resources. Implementations such as formal specifications are generated from the scenario. The scenario of the system is pattern-matched to a process-based specification segment. The scenario of the system is pattern-matched to a formal specification in reference to an inference engine. A mathematical logic is applied to the formal specification in order to identify a presence or absence of mathematical properties of the scenario.

FEATURES AND BENEFITS

- The medium reduces partiality of system requirement specifications, system development time and the amount of testing required of a new system.
- The medium allows translating the scenario of the system to a script, without the use of an automated inference engine.

APPLICATIONS

- Satellites
- Software Systems
- Sensors
- Robotic Operations
- Spacecrafts
- Artificial Intelligence

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-15148-1, please contact:

Darryl Mitchell
Technology Manager
NASA Goddard Space Flight Center
Innovative Partnerships Program Office
darryl.r.mitchell@nasa.gov
301-286-5169