Inria-Simula Workshop 16/17 March 2021

Session on "Intelligent Sessions"

co-organized by Mathieu Acher (Inria), Benoît Combemale (Inria), and <u>Arnaud Gotlieb</u> (Simula)





Program:

09:30 - 09:40 Introduction - RESIST (Arnaud Gotlieb)

09:40 - 10:10 Panel "Intelligent Systems" (Moderator: Mathieu Acher)

Invitees: Prof. Jean-Marc Jézéquel, Prof. James Crowley

10:10 - 10:25 Testing learning capabilities of intelligent collaborative robots (Mohit K. Ahuja)

10:25 - 10:40 Drones and use cases (François Bodin)

10:40 - 10:55 Testing Autonomous Cars (Aizaz Sharif)

10:55 - 11:10 Deep Software Variability and Intelligent Systems (Luc Lesoil)

11:10 - 11:25 Digital Twin-based Anomaly Detection in Cyber-physical Systems (Qinghua Xu)

11:25 - 11:30 Wrap-up



Associate Team RESIST in Software Engineering

Inria: DiverSE / Inria Rennes (Mathieu Acher, Benoît Combemalle)

Simula: VIAS Dept. (Arnaud Gotlieb) COMPLEX Dept. (Shaukat Ali)

Status granted for 3-years (renewable)

Co-organized bi-yearly workshops

Bilateral exchange program with short/long-term visits

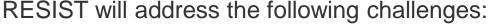
Shared working plan





Scientific Ambition

RESIST will research the scientific foundations of "Resilient Software", i.e., software systems which can resist failures without significantly degrading their functionality.

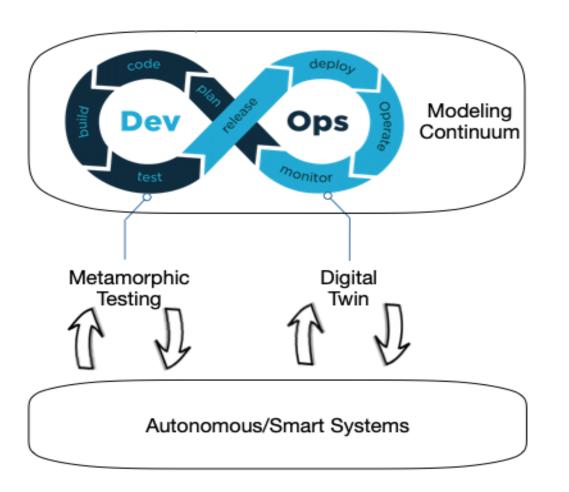


- Utilizing observation data for assessing resilience under varying conditions
- Digital twins for continuous improvement of resilient autonomous/smart systems
- Resilient autonomous systems in the digital and physical world









Artificial Intelligence (ML / optimization / planning)

http://gemoc.org/resist/





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