

Assurance of Autonomous Systems: PANEL

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- ▶ CPS are safety-critical, as failure events may cause injury or the loss of high-value assets.
- ▶ The combination of autonomous, dynamic/adaptable and cooperative functionalities supported by networked communications increases the exposure of these systems, risks and consequences
- ▶ In such context, assurance, V&V, and certification become of paramount importance.



Questions

In order to limit and convey a bit the discussion otherwise possibly too broad, I made beforehand the following questions to the panelists.

1) What are the differences from "traditional" assurance and assurance of autonomous systems? Is "assurance of autonomous system" just a new field where to apply known concepts and techniques, or does it require different concepts and a different mindset?



Questions

- 2) Are there breaking points with nowadays standards for the safety-critical domain (e.g., ISO26262 for automotive)? Which are the major challenges for the purposes of certification?

- 3) Which are the main difficulties in introducing autonomous (automotive) systems from the perspective of national regulations, governance, and liability?



Panelists



Hermann Kopetz (Vienna University of Technology);

Paulo Veríssimo (University of Luxembourg);



Henrique Madeira (University of Coimbra);

Mohamad Gharib (University of Florence)



The panel will last 1 hour and half and I would like each of you to make some statements (10-12 minutes each) before opening to the floor