Discussion session
Top Technical Challenges over the next 10 Years

Panel starting the discussion:

Henrique Madeira, Mirek Malek, Roy Maxion, John Rushby,
Lorenzo Strigini (moderator)

Workshop on Evaluation of Dependability and Resiliency
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The questions for this whole workshop

regarding quantitative evaluation across
  • techniques
  • application areas

Where are we? Where is the field headed? Where *should* it be headed?

We asked each "long talk" speaker to take a historical view
of *one area* of quantitative evaluation

  • which challenges have been successfully overcome?
  • which are still "work in progress"?
  • for which are we still pretty much where we were, despite trying hard? Why?
  • which have been simply abandoned? Why?
  • which are the new challenges?

Panelists' (and everyone's) brief for this session

- this session is meant to stir up a more general discussion, including questions of priorities among the problems to solve

- you might suggest priorities among challenges proposed by the previous speakers, or argue for different "main challenges"

- brief initial statements
  - each panelist may argue for at most 3 "top challenges", picking from the previous speakers' menus or taking issue with them, in 7 minutes at most

some good ways to start a fight

- "if I had to set up a national research budget for quantitative evaluation, I'd give priority to..."
    or

- "this is a great intellectual challenge, but ..."
  - no chance of real results in 10 years   or
  - solving it would make no real difference in the real world
      or

- "what you said is important, but there is no real challenge"
    or

- "there is an elephant in the room"
  ... and within 10 years we *could* do something about it
  - e.g., Bev's *validation* elephant

e.g.

- one might thus criticise the challenge "define appropriate security metrics"
  - perhaps together with "Develop quantitative information-systems risk management to be at least as good as quantitative financial risk management"

Now over to the panelists