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Test Analytics, AI/ ML
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AI for Testing Today (Panel: Part I)

Presented by:

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Tariq King

Tariq King is the senior director and engineering fellow for quality and performance at Ultimate Software. With more than fifteen years' experience in software testing research and practice, Tariq heads Ultimate Software's quality program by providing technical and people leadership, strategic direction, staff training, and research and development in software quality and testing practices. Tariq is a frequent presenter at conferences and workshops, has published more than thirty research articles in IEEE- and ACM-sponsored journals, and has developed and taught software testing courses in both industry and academia. His primary research interest is engineering autonomous self-testing systems. He is cofounder with Jason Arbon of the Artificial Intelligence for Software Testing Association. Contact Tariq via LinkedIn.

Jason Arbon

Jason is the CEO of test.ai, which is redefining how agile teams test their mobile and web apps. He was recently the director of engineering and product at Applause.com/uTest.com. Jason previously held engineering leadership roles at Google (Chrome/Search) and Microsoft (WindowsCE, SQL, BizTalk, Bing) and coauthored How Google Tests Software and App Quality: Secrets for Agile App Teams. In his spare time, Jason likes to read up on AGI and consciousness and is working on a new personalized search engine.

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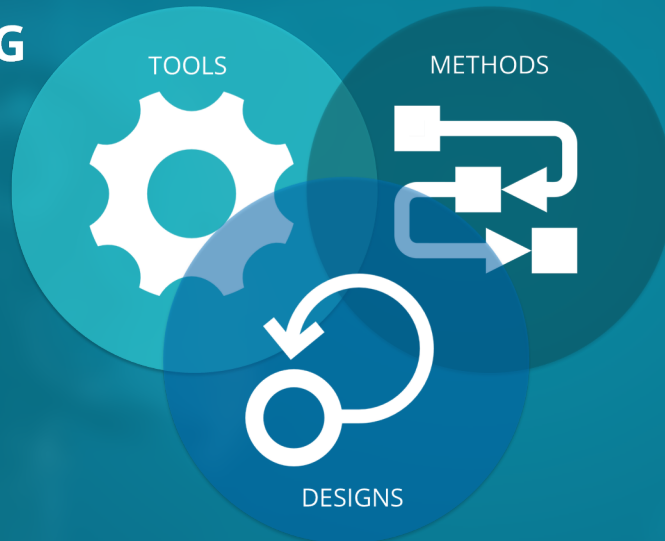
AI FOR TESTING TODAY

PANEL: PART I

OCTOBER 4, 2018

ANAHEIM, CALIFORNIA, USA

AISTA

STAR WEST
A TECHWELL EVENT

AI TESTING

TESTING AI

TOOLS

METHODS

DESIGNS

SELF-TESTING

PANEL DESCRIPTION

AI FOR TESTING TODAY

How can we apply AI to the testing problems of today? What works and what doesn't work? Are there any critical lessons that have been learned? This panel discusses AI frameworks and approaches that are most useful today for testing real world systems. Hear advice from the folks that have had successes and failures applying AI to real world testing problems so you can avoid the same mistakes and bring back proven techniques for applying AI to software testing challenges.

SEEDED QUESTIONS

1. What is the difference between AI and Machine Learning?

2. Why are there so many different answers to how AI will impact testing?

3. As a tester should I learn AI or just 'use' it?
   If I should learn it, how difficult is it to learn?

4. What are the easiest testing problems for AI to solve today?
   What are some of the hardest?

5. How about testing AI-based systems?
   What are the best approaches to testing these types of systems?
   What are the biggest challenges with testing these types of systems?

COMMUNITY QUESTIONS

6. How should an experienced automation professional approach the transition to AI Testing?

7. We are seeing a lot of AI-based testing tools coming on the market, but we aren't seeing much progress around tools and techniques for testing AI-based systems. Any reasons why this area is not explored yet?

8. How will AI for testing today reduce human efforts when a user needs to test multiple apps in the same domain space?

9. Do we have any high level strategy for testing AI systems?

10. Can AI solve the problem of automating camera picture quality tests? If yes, how?

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COMMUNITY QUESTIONS

11. What is the simplest AI functionality to introduce into conventional test automation?

12. If a company wanted to get started today, what are the first steps to take?
    In what timeframe should they be expecting some minimal return?
    What will the initial costs be?

13. It seems like the AI testing tools are trying to invent the wheel by themselves,
    are there initiatives to share tips, code or even useful trained neural networks?
    Does AISTA intend to be at that level?

14. Is it possible to have our own AI and train it because you work in health care and need more security? And how?

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COMMUNITY QUESTIONS

15. Although there are a great deal of resources covering AI from a development perspective, there are few that deal with testing AI-based software despite the challenges and risks it poses. For example, how do we test software…

    a) When the decision logic is not clearly defined?
    b) When the results may be wrong and that's okay sometimes?
    c) That learns and adapts based on interactions?
    d) To find problems that will matter when the domain is complex and massive?
    e) That may need to collaborate or compete with other AI software?

16. What are common challenges a tester is facing when it comes to AI?

17. Can AI be used to find a defect or potential defect before coding starts?

COMMUNITY QUESTIONS

18. How can we build confidence in AI-based testing tools?

19. What is the plan for AI testing as an organization or community?

20. What challenges do we face today in AI for testing?
    Among these, what are the top three problems that we should focus on today?

21. How should startup companies adopt AI?

22. For people who have been long in manual testing in the Banking Domain, what is the first step to adapt to the change called AI?

23. Why is AI (more) important for a tester?
    How do we adopt an AI testing approach to current traditional process?

COMMUNITY QUESTIONS

24. According to the ISTQB syllabus, among seven basic testing principles there is the fact that "exhaustive testing is impossible", but how far are we from the exhaustiveness?

25. How can the data and output from existing test automation tools be leveraged for AI-enabled testing?

THANK YOU