



A TECHWELL EVENT

T19

Test Analytics, AI/ ML

Thursday, October 4th, 2018 3:00 PM

AI for Testing Tomorrow (Panel: Part II)

Presented by:

Tariq King, Ultimate Software
Jason Arbon, test.ai

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350 Corporate Way, Suite 400, Orange Park, FL 32073
888-268-8770 · 904-278-0524 - info@techwell.com - <http://www.starwest.techwell.com/>

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 TOMORROW

PANEL: PART II

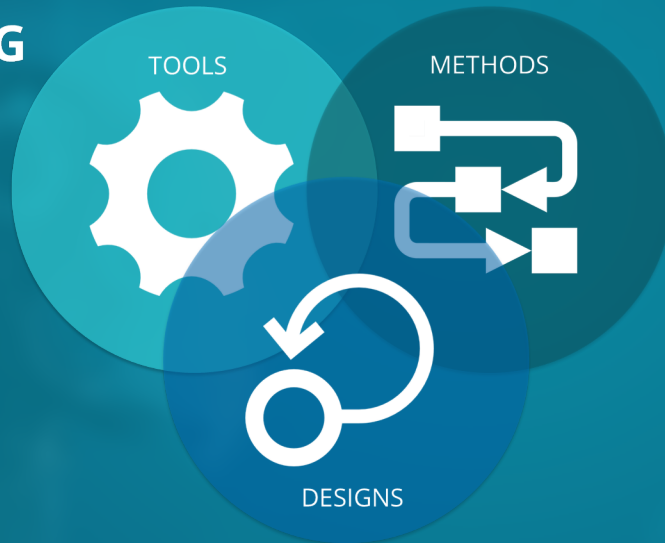
OCTOBER 4, 2018

ANAHEIM, CALIFORNIA, USA



AI TESTING

TESTING AI



SELF-TESTING



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PANEL DESCRIPTION

AI FOR TESTING TOMORROW

What does AI mean for the future of testing? What aspects of testing will the machines replace? What things will AI soon be better than humans at and what things will humans always do better than AI? This panel explores the future of AI for testing including thoughts on how humans can prepare for a future of testing where we work alongside AI. Hear experts discuss their views on the future impact of AI in testing and where the boundary between human and AI-powered testing truly lives.

SEEDED QUESTIONS

1. Will AI replace all testing jobs?
If so, when?
2. What is the first testing role that will be eliminated by AI?
3. What will our jobs be when AI for testing becomes mainstream?
4. How can we start to prepare for a future where AI tests software?
5. What is “self-testing” and when will it be widely deployed?
6. What AI for testing advances do you foresee in the near future, i.e., 1-2 years?
How about in the next 5-10 years and beyond?

COMMUNITY QUESTIONS

7. At what stage should AI be included in any project?
Can AI fully replace manual testing at the very beginning of application development?
How feasible would it be for AI to be used for retesting?
8. Does AI for testing become completely robotic?
9. Are there any open source tools that can be used for implementing AI in testing?
Any for automatic object identification without having to manually construct XPath's?
10. Can AI be used to test ad platforms, personalization or recommendation engines?
If so, how?
11. How can we differentiate between legitimate AI testing tools and marketing hype?

COMMUNITY QUESTIONS

12. Will AI eventually be used to test all layers of the technology stack?
Will AI be used for tests in all layers of the testing pyramid?
Where will it provide the greatest advantage?
13. If we expect anything from AI-based test generation, it seems that model-based testing will be a very important piece of the puzzle...
 - Will AI be able to generate such models by itself?
 - Would that also lead to AI building the application?
14. Can we use AI for areas where humans may not perform well? (e.g., Moonwalking Bear)
15. In what ways can testers improve their capabilities to work with AI testing?
Can you give three major points for a path to testing with AI?

COMMUNITY QUESTIONS

16. Apart from ScopeMaster, do you know of any AI tools that can be used to examine and analyze user stories?
17. AI techniques can be subject to adversarial data. For example, an image of an object can be changed in subtle ways that a human would not notice, and might cause a machine to misclassify it.
 - Are there ways to ensure that dev tools and practices don't evolve in ways that generate buggy code that escape AI testing?
18. Could you paint a vision for AI testing?
19. How do we evaluate an AI testing tool?

COMMUNITY QUESTIONS

20. Do you have a plan to develop tools or products which will help the AI testing industry? Will you focus on any of the following areas to provide AI testing tools or services:
 - a) Test suite optimization
 - b) Predicting the test process
 - c) Data/log analytics
 - d) Defect analysis
 - e) Automatic code review
21. Will testers need programming skills? Should testers learn languages like Java, JavaScript, Python, and Swift?

COMMUNITY QUESTIONS

22. What is the roadmap for building a new AI test tool?
23. What are the steps or approach that AI testing solutions will need to consider to be understand systems like a human tester does?

THANK YOU

