

The Role of Testing in an AI Future

Keeping Artificial Intelligence on the Rails

Not so long ago ...



Paper and ink

A cautionary tale

TRTWORLD

ABSOLUTE SECTOR 0000000, SYSTEM BOOT

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WELCOME TO THE
DUNGEON

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PHONE: 430791,
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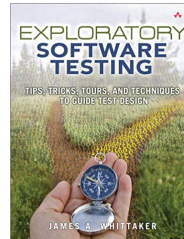
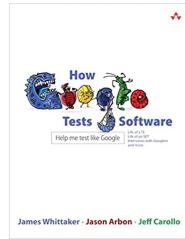
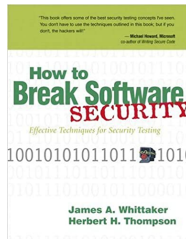
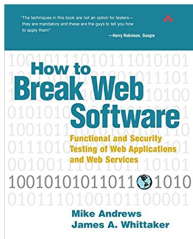
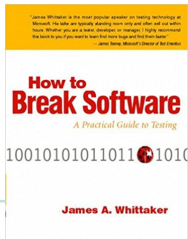
AI is different

- Inputs
- Outputs
- Data structures
- Computation

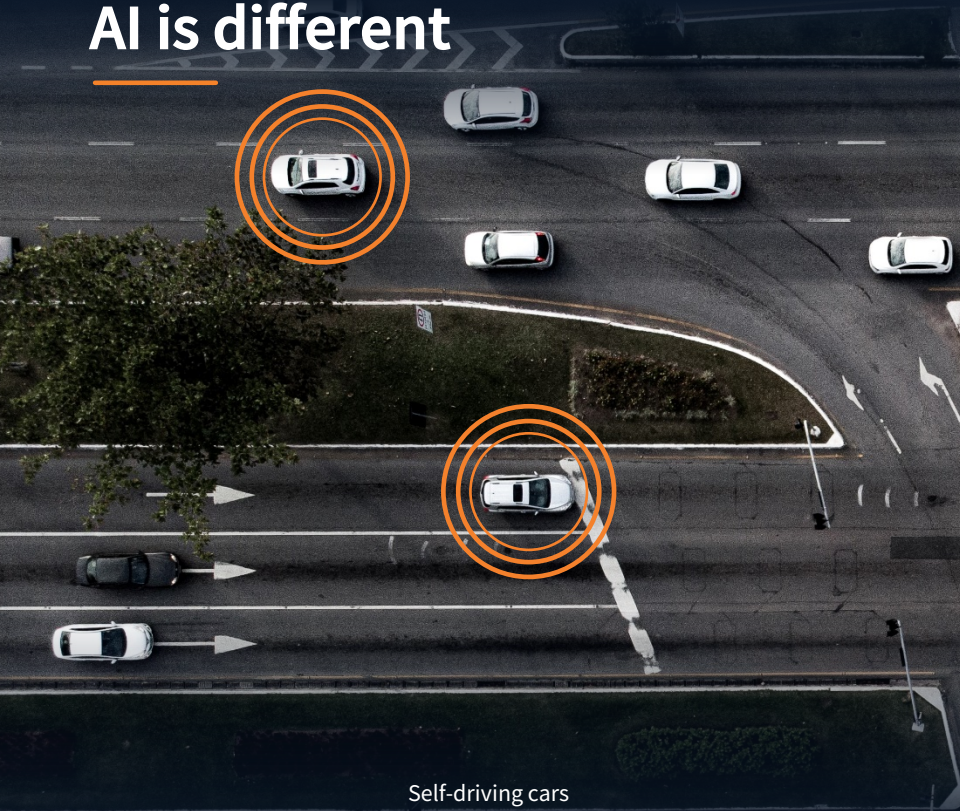


Software

- Raw data
- Labels
- Algorithms
- Patterns
- Feedback loop



AI is different



Self-driving cars



People-counting in a room

AI is vulnerable to corruption

TECH 03/24/2016 10:19 am ET | Updated Mar 28, 2016

Microsoft Chat Bot Goes On Racist, Genocidal Twitter Rampage

Seriously? Seriously.

By Damon Beres



MICROSOFT VIA TWITTER

Here's a clear example of artificial intelligence gone wrong.

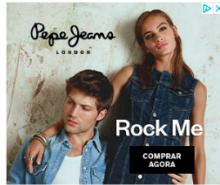
Microsoft launched a [smart chat bot Wednesday](#) called "Tay." It looks like a photograph of a teenage girl rendered on a broken computer monitor, and it can communicate with people via Twitter, Kik and GroupMe. It's supposed to talk like a millennial teenage girl.

Less than 24 hours after the program was launched, Tay [reportedly began to spew racist, genocidal and misogynistic messages](#) to users.

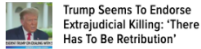


Facial Recognition Bias by [Huffpost](#)

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TRENDING



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Facial recognition systems show rampant racial bias, government study finds



By Brian Fung, CNN Business
Updated 2337 GMT (0737 HKT) December 19, 2019

Washington, DC (CNN Business) – Federal researchers have found widespread evidence of racial bias in nearly 200 facial recognition algorithms in an extensive government study, highlighting the technology's shortcomings and potential for misuse.

Racial minorities were far more likely than whites to be misidentified in the US government's testing, the study found, raising fresh concerns about the software's impartiality even as more government agencies at the city, state and federal level clamor to use it.

In a release, Patrick Grother, one of the researchers behind the report, said race-based biases were evident in "the majority of the face recognition algorithms we studied." Compared to their performance against whites, some algorithms were up to 100 times more likely to confuse two different non-white people.



Related Article: ACLU sues federal government over surveillance from facial recognition technology

Asians, blacks and Native Americans were particularly likely to be misidentified, said the National Institute for Standards and Technology, a branch of the Commerce Department, which published the report on Thursday.

In another test, black women were likelier than other groups to be falsely identified in a large database of mugshots maintained by the FBI — offering a glimpse of how the technology could be misused by law enforcement.

Tay the Racist Chatbot by [CNN](#)

The results add to growing alarm among policymakers, privacy groups and criminal justice activists about a technology that's growing increasingly common at airports, police departments

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