

The CURIOUS CASE of the SELF-CORRECTING BUG

DEBUGGING
for
BEGINNERS

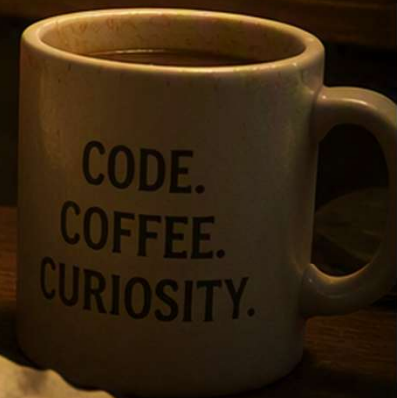
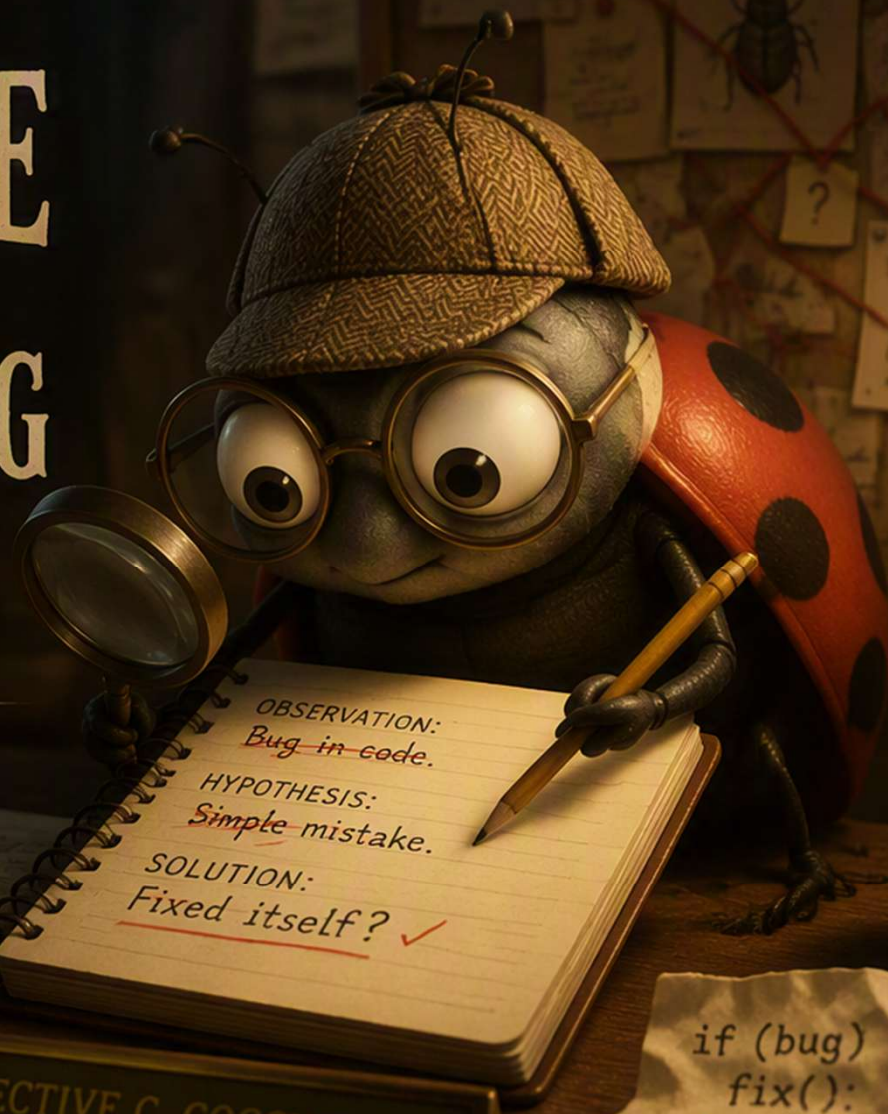
INSECT
INTELLIGENCE

THE ART OF
OBSERVATION

Always
Question
Everything



DETECTIVE C. COCCINELLA
PRIVATE INVESTIGATOR



```
if (bug)  
  fix();  
else  
  celebrate();
```





Testimist®

  @revelzen

René van Veldhuijzen ✓

Test Positivo | (the) Testimist | Strategic Consultant | Test Community Architect

Bunnik, Utrecht, Nederland

TestMass 

SV DIJK
TENNIS



Dienst Justitiële Inrichtingen
Ministerie van Justitie en Veiligheid



TestMass



Testdag

SQUERIST



I STICK TO
MY OPINION

PLEASE DO NOT
CONFUSE ME WITH
FACTS

the Testimist®

noun (m.)

Pronunciation: [tɛsti'mɪst]

Traction pattern: tes·ti·mist

Inflections: testimists (plural)

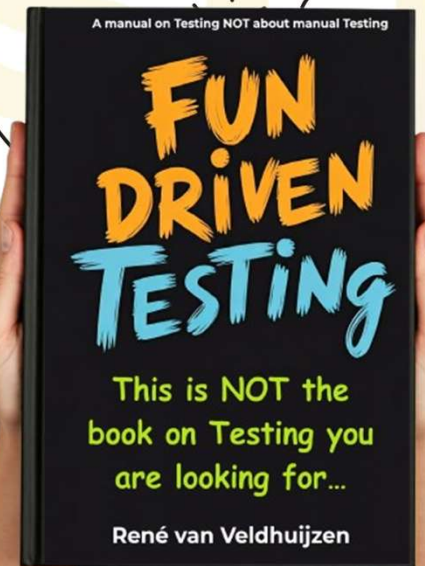
Someone who always expects quality to be demonstrable and transparent

1. Someone who looks at quality from the client's point of view
2. Someone who provides insight into quality through testing
3. Someone who believes in testing
4. Test-thinking person
5. "Testing" in Estonian
6. Test Positivo



Pessimist

Optimist



ACT I

The Strange Beginning



The Mystery

Observed behaviour

- ✓ SSO authentication failures
- ✓ No recent changes deployed
- ✓ Impacting DEV, TEST and ACC

Initial assumption:

“A common root cause must exist.”



A Bug unlike any other

- ✓ No commit
- ✓ No merge
- ✓ No patch
- ✓ No config change
- ✓ No help



HEALING IN PROGRESS

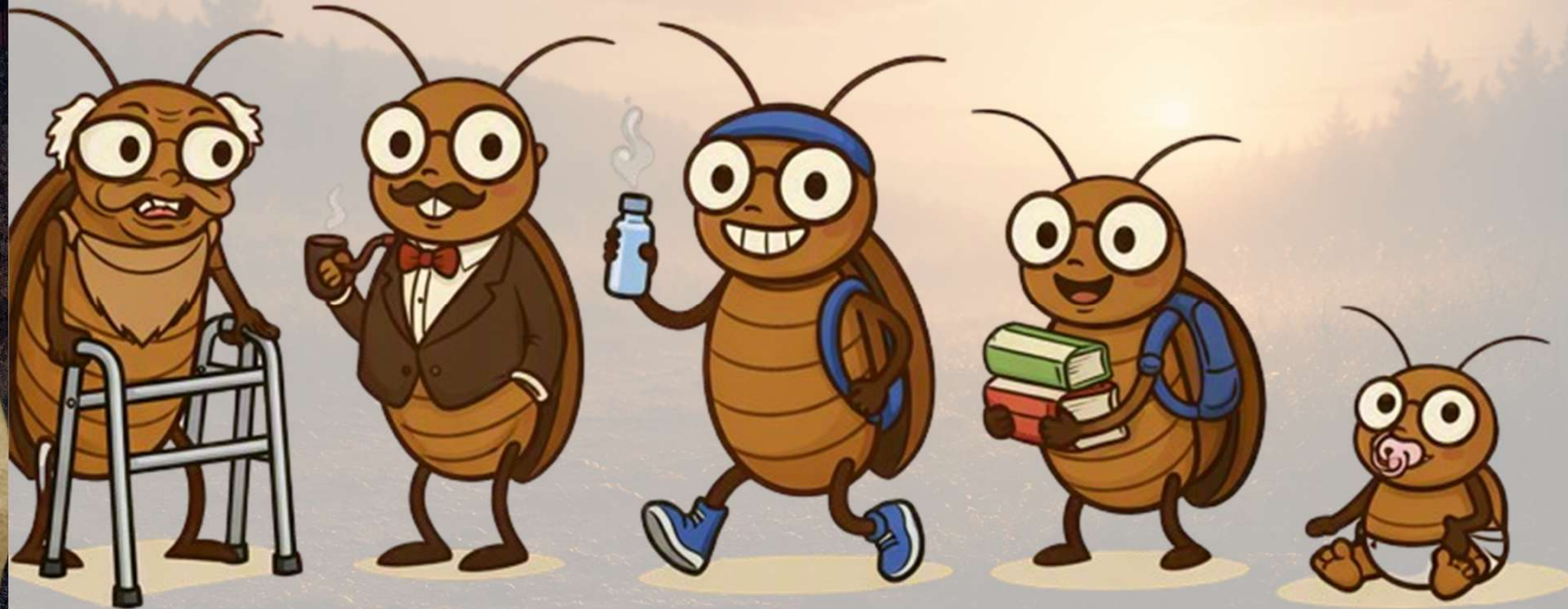
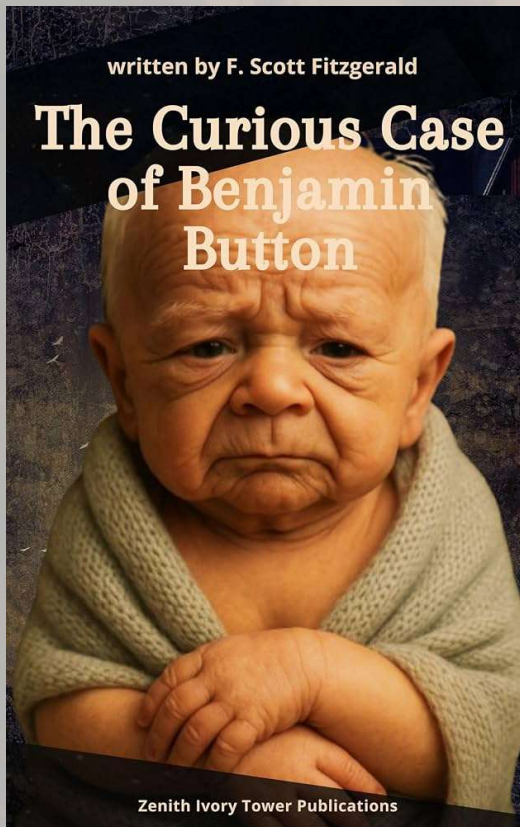


This should not be possible

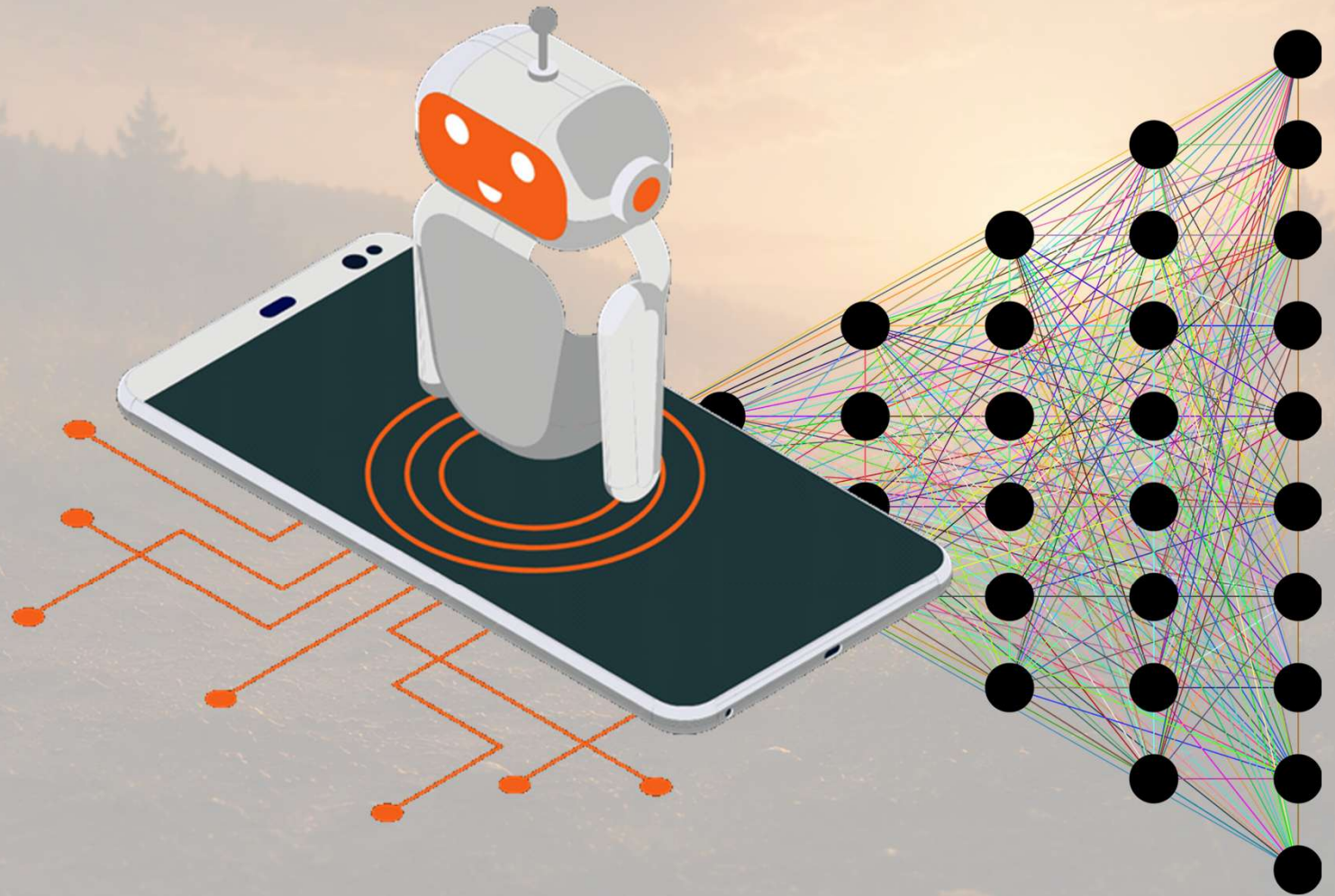
- ✓ Configuration differences
- ✓ Certificates
- ✓ Identity Providers
- ✓ Network connectivity
- ✓ Time synchronization
- ✓ Platform health
- ✓ Test error (aka ME)



The Benjamin Button parallel



The Realisation



ACT II

The Age of Adaptive Systems



ADAPT.
LEARN.
EVOLVE.

The AI-Augmented Tester Era

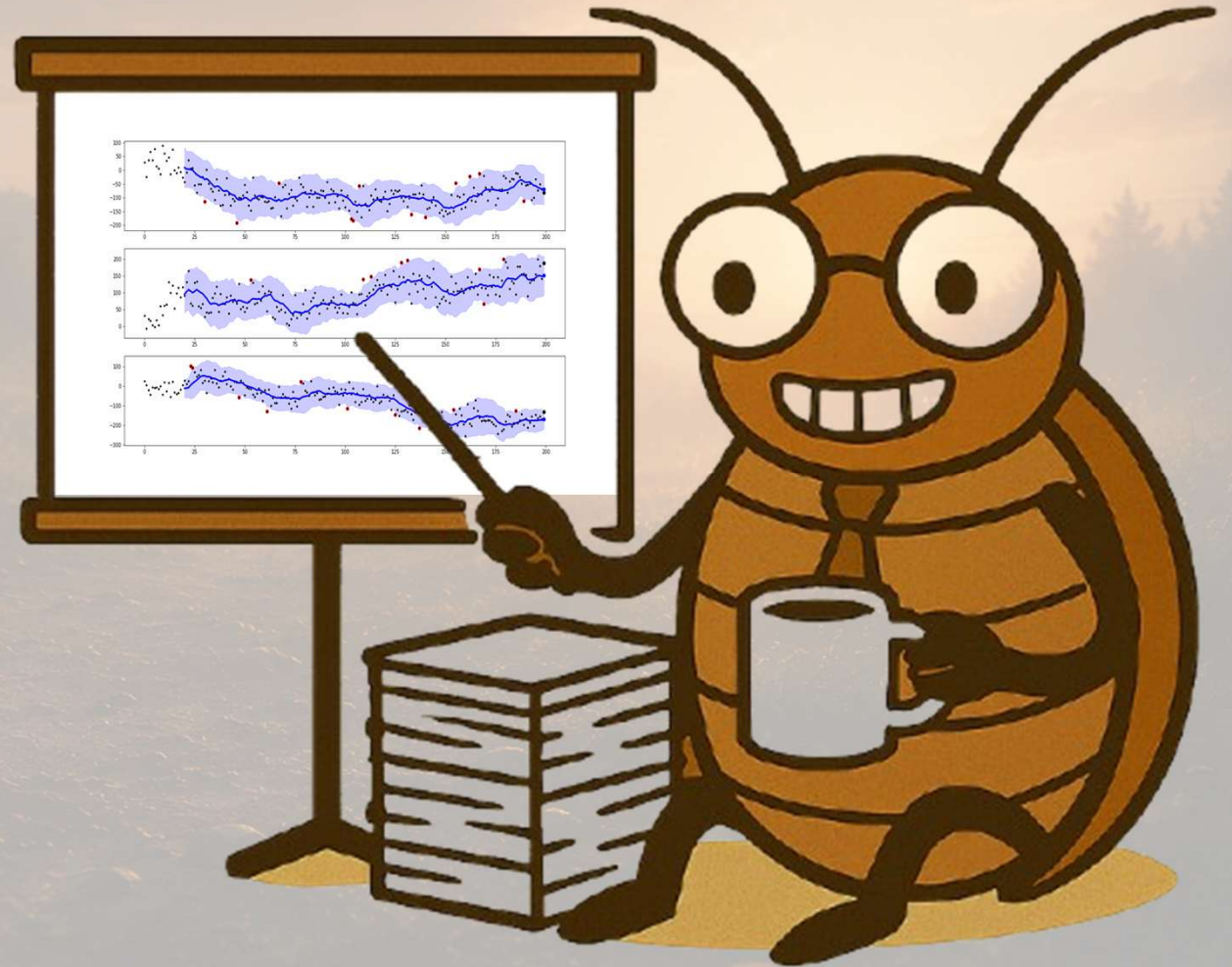
 Observe

 Adapt

 Predict

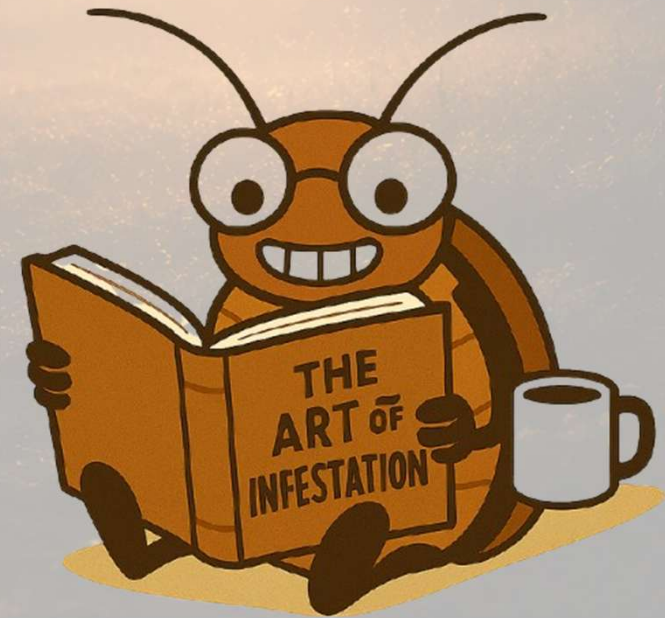


Pattern Whisperers



Automation that ages backwards

- 🐜 Self-healing selectors
- 🐜 Adaptive frameworks
- 🐜 Stabilizing automation



Test data with a wild imagination



User updates password while locked out



Checkout with negative quantity items



Profile photo upload before account creation



Define the structure of your records...

Name	Title	Position	Dummy Data
id	#	0	↑ ↓ number
names	Name(s)	01	↑ ↓ name
lastname	Last Name	02	↑ ↓ name
birthdate	Birth Date	03	↑ ↓ date
birthplace	Birth Place	04	↑ ↓ capital city
isliving	Is Living?	05	↑ ↓ yes/no
gender	Gender	06	↑ ↓ gender
deathplace	Death Place	07	↑ ↓
deathdate	Death Date	08	↑ ↓
age	Age	09	↑ ↓ age

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Systems that explain themselves



Bias



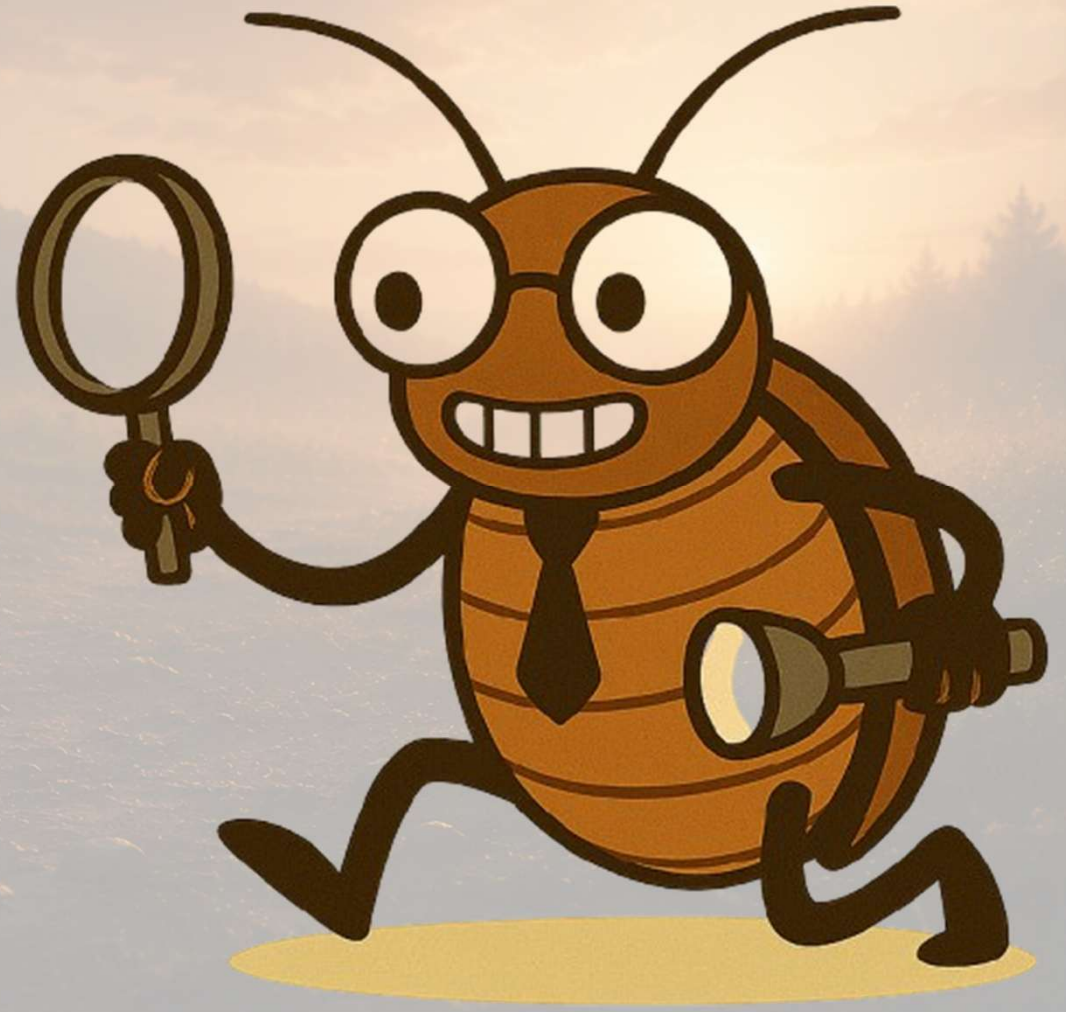
Assumptions



Hidden logic



Blind spots



Automation OR Augmentation

- 🦄 Automation evolves into collaboration
- 🦄 Tools that learn beside us
- 🦄 Humans who design resilience



ACT III

The PRA and the AI



The problem with traditional PRA

- 🐇 Time
- 🐇 Subjectivity
- 🐇 Repeatability



AI makes the difference

“System crashed!! Again 😡”



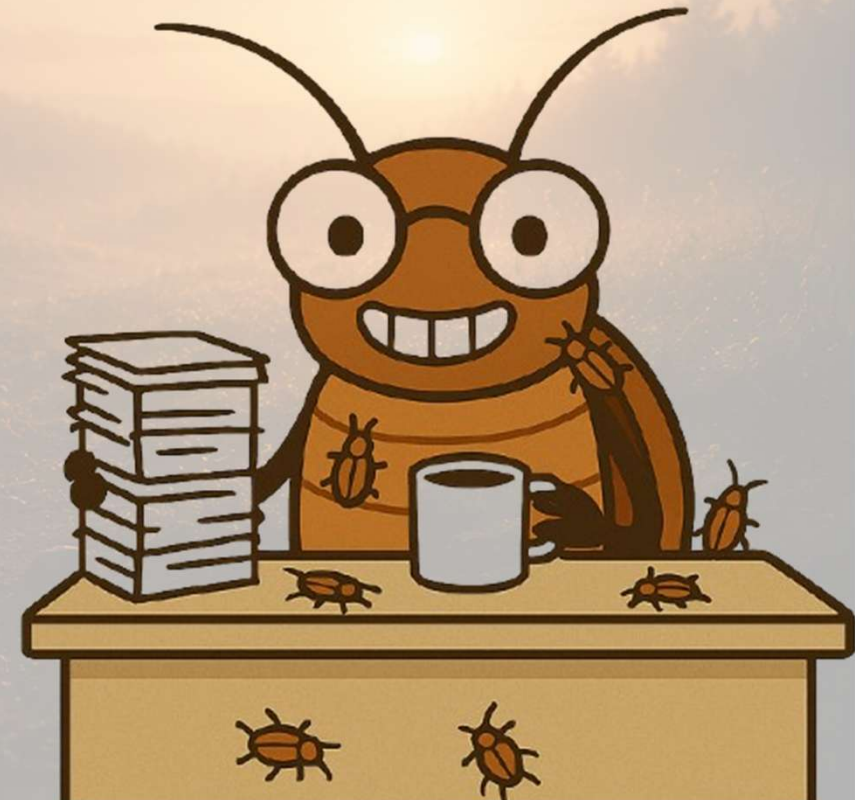
Incidents



Classification



Heatmap



The Adaptive PRA(i)

 Repeatable

 Explainable

 Scalable

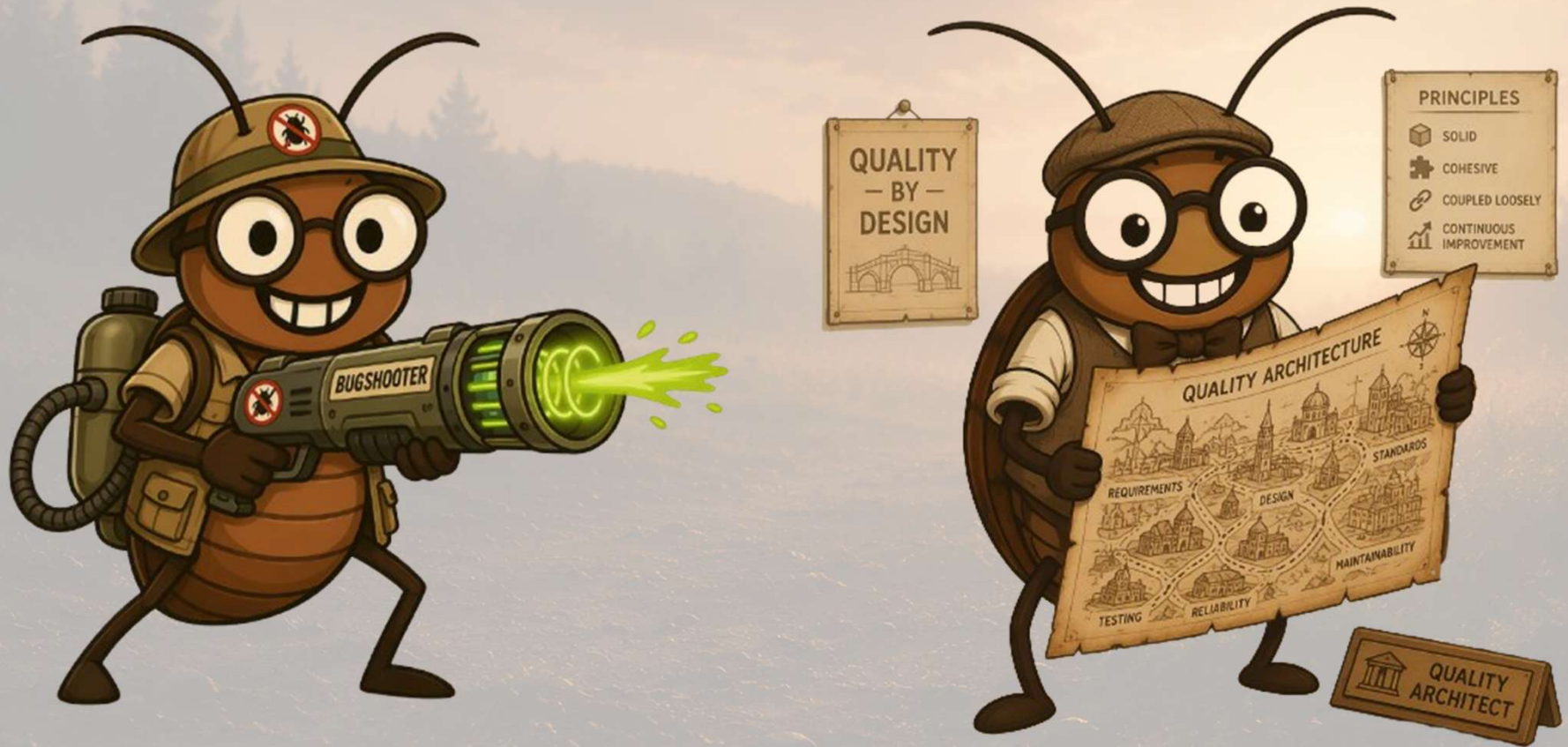


ACT IV

What this means for us



From Bug Hunter to Quality Architect



What we keep as Humans

Critical
thinking

Creativity

Curiosity



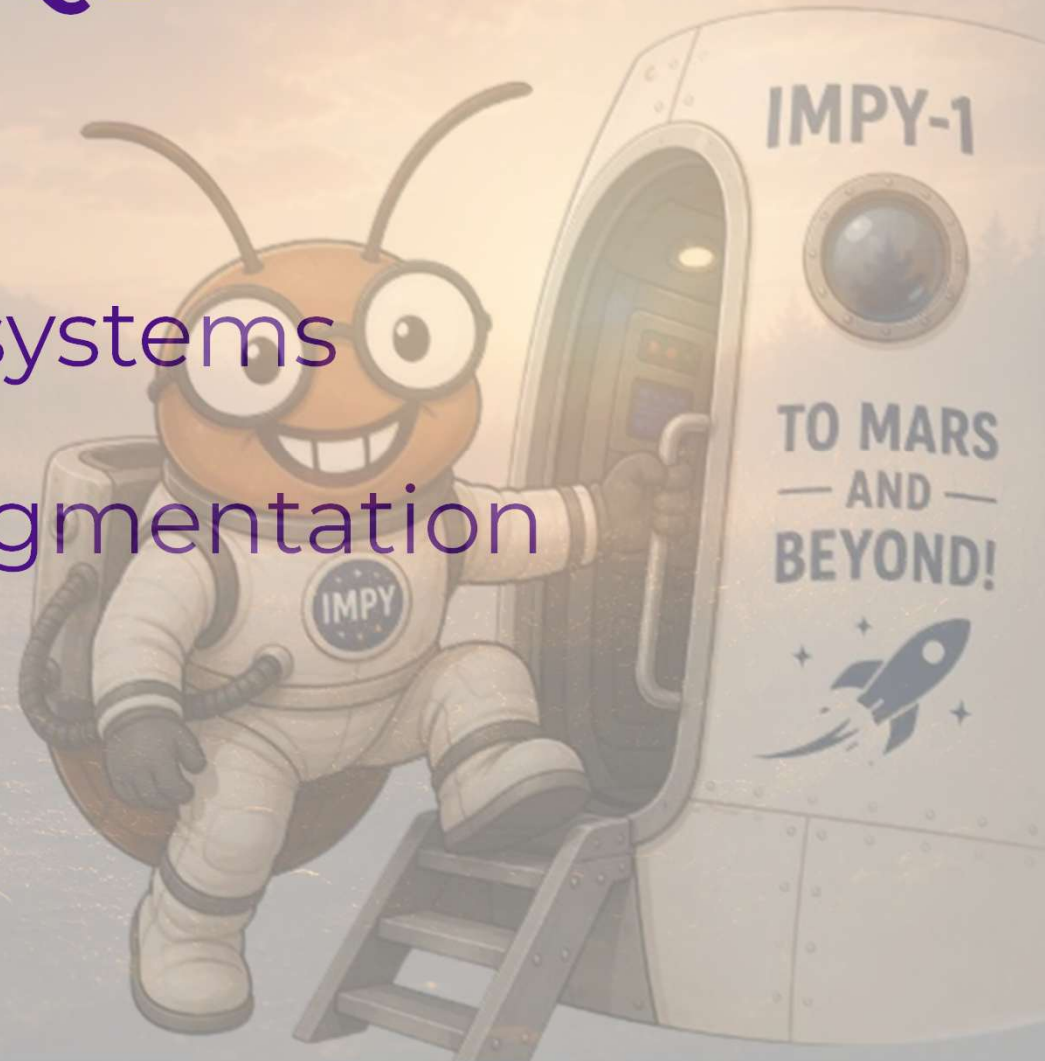
Ebullience

Ethics

Empathy

What we gain as QA/QE

- 🐛 Time to explore
- 🐛 Insight from smarter systems
- 🐛 Resilience through augmentation
- 🐛 Space for creativity
- 🐛 Room for ebullience



Becoming the Quality Architect



CREATE model



mTACON



The Moral of the Story



Final Thoughts



mOTACON



Q&A



Thank you!



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