TESTING PROPERTIES WITH QUICKCHECK

@steshaw

QUICK OVERVIEW OF QUICKCHECK

- Demo (basics)

APPEAL TO AUTHORITY

- Better than unit tests, Michael Nygard (2013)

TESTING UI

- Choose your own adventure — randomised user actions.
- Demo (arbitrary)

TESTING CONCURRENT SYSTEMS WITH QUICKCHECK

… or …

- Concurrent
- with
- Testing
- QuickCheck
- Systems

TESTING CONCURRENT SYSTEMS (CONT.)

- Google for "Erlang QuviQ"
- These ideas apply also to distributed systems.

REFERENCES

- Original QuickCheck paper from 2000 by Koen Claessen and John Hughes (PDF)
- QuickCheck on Hackage

REFERENCES—CONCURRENT SYSTEMS

- Erlang's QuickCheck
- Testing Erlang Concurrency with QuickCheck (PDF)
- Finding Race Conditions in Erlang with QuickCheck and PULSE (PDF)

REFERENCES— DISTRIBUTED SYSTEMS

- Testing Telecoms Software with Quviq QuickCheck (PDF)
- Modeling eventually consistent databases with QuickCheck (Video), Jon Meredith, Basho.