

Testing properties with QuickCheck

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Quick overview of QuickCheck

- Demo (basics)

Appeal to authority

- Better than unit tests, Michael Nygard (2013)

- 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.

- 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.