

Testing properties with QuickCheck

Quick overview of QuickCheck

- Demo (basics)

Appeal to authority

- Better than unit tests, Michael Nygard

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

Testing Concurrent systems

... or ...

- testing
- with
- concurrent
- software
- QuickCheck

Testing Concurrent systems (Part 2)

- Google for “Erlang QuviQ”
- Same applied to distributed systems.

Further reading

- <https://hackage.haskell.org/package/QuickCheck>
- Original paper <http://www.cs.tufts.edu/~nr/cs257/archive/john-hughes/quick.pdf>

Further reading—Concurrent Systems

- <http://www.quviq.com/products/erlang-quickcheck/>
- Testing Erlang Concurrency with QuickCheck
- Finding Race Conditions in Erlang with QuickCheck and PULSE

Future reading—Distributed Systems

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