

The background of the image is a blurred financial market data display. It features various stock indices and their values in different colors (green for up, red for down). Visible text includes 'OMXC20', 'OMXC20 INDEX', '10916.69', '10847.17', 'Buy', 'OMXRG1', 'OMX RIGA GI', '57.3180', '6025.9680', '5993.7030', 'Buy', '1172.94', '0.87%', '984.13', '0.87%', 'OMX18', 'OMX ICELAND 8', '28289.06', '27956.04', 'Buy', '599.40', '1632.51', '0.38%', '6230.9', 'Sell', '1172.94', '0.81%'. There are also line graphs showing price trends.

# REPL-DRIVEN DEVELOPMENT - CLOJURE'S SUPERPOWER

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SENIOR SOFTWARE ARCHITECT

WORLD SINGLES NETWORK

# WHO AM I?

- World Singles Networks
  - 40+ online dating sites
  - Powered by 105k lines of Clojure
  - In production since Clojure 1.3
- Open Source
  - next.jdbc, clojure.java.jdbc
  - HoneySQL
  - clj-new, depstar
  - Expectations, Readme
- Senior Software Architect
  - World Singles Networks
  - Broadchoice
  - Macromedia
- Journey to Clojure
  - Assembler, COBOL, C, C++, Java, CFML(!), Groovy, Scala
  - But lots of Lisp/FP @ uni in the '80s!

# REPL-DRIVEN DEVELOPMENT

- What do we mean by this?
  - Lots of languages have a REPL, right?
  - All Clojure developers already use the REPL, right?
  - "I am baffled when people type things into the REPL"
    - Stuart Halloway - REPL-Driven Development (Chicago Clojure, 2017)

# SOME CAVEATS ABOUT THIS TALK

- I'll be live coding so we can expect things to go wrong...
- I use the latest Clojure CLI tools (1.10.1.727) and my dot-clojure repo/aliases
- I use Atom + Chlorine + Socket REPL
- All of this is possible with lein, nREPL, emacs/vi/cursive/vscode

# SOME CAVEATS ABOUT THIS TALK

- I use tools.deps.alpha's add-lib3 branch to add dependencies to a running app
  - With Leiningen, you can use Pomegranate to do the same thing
- I use Reveal to supplement my editor/REPL for data visualization etc
  - It's optional – but there's also Portal (browser-based) and REBL (Cognitect)
- I want this to be interactive – interrupt me and ask as many questions as you want!

# WHAT WILL WE BUILD?

- We'll build a small web application from scratch
- We'll start by creating a brand new, minimal project (app)
- We'll start a REPL
- We'll add code and dependencies and tests and see how far we can get in an hour!

**TIME TO START THE REPL**

# WHAT DID WE LEARN?

- Don't type into the REPL – use "Rich Comment Forms" in your code
- Being effective with a REPL requires...
  - no magic
  - no special refresh/restart tooling
  - only a few commands/hotkeys
- Be like Rich Hickey and Stuart Halloway!



# LINKS AND RESOURCES

- My dot-clojure & atom-chlorine-setup (along with clj-new etc):
  - <https://github.com/seancorfield>
- Clojure CLI
  - Reference Documentation: [https://clojure.org/reference/deps\\_and\\_cli](https://clojure.org/reference/deps_and_cli)
  - Releases: <https://clojure.org/releases/tools>
  - Tools: <https://github.com/clojure/tools.deps.alpha/wiki/Tools>
- Stuart Halloway - RDD talk - <https://vimeo.com/223309989>
- Eric Normand - RDD course (absolutely worth a month's subscription!):
  - <https://purelyfunctional.tv/courses/repl-driven-development-in-clojure/>

# CONTACTING ME

- I'm **seancorfield** everywhere: github, slack, twitter, zulip... even facebook (non-tech!)
- I blog (occasionally) at An Architect's View - <https://corfield.org>
  - Powered by Cryogen which is powered by Clojure!