# THE LUCENE SERVER A BRIDGE BETWEEN TWO WORLDS

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#### TIGERTEXT

TigerText is a secure mobile messaging platform that you set up for your hospital or business to improve workflow and reduce risk. Employees gain the convenience and familiarity of traditional texting while the enterprise retains the control and security it demands

(fromTigerText Site)





#### AUTOCOMPLETE

#### They wanted this...







#### SCOPE

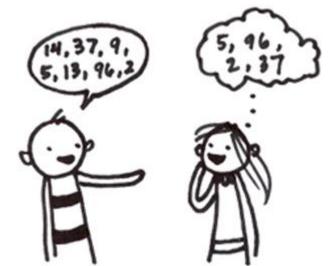
The goals for this talk are to show you:

- how we connected two seemingly icompatible worlds
- how we started with a very specific problem and ended up with a very general solution





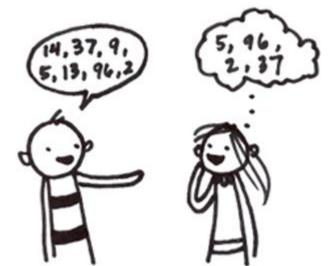
Once upon a time on server world...







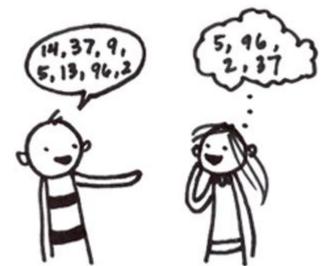
#### Erlang and Redis were happily talking







But they needed *Lucene*, something that only *Java* knew...







... and Java, well...









#### Yo! The red locust! They did not have my cunning!1





Jinterface Java package contains java classes, which help you integrate programs written in Java with Erlang (fromErlang Docs)





- Comes with the Erlang distribution
- Is written in Java
- Let's you create nodes and processes inside a Java VM
- We extended it to handle OTP gen\_server protocol





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Apache Lucene<sup>TM</sup> is a high-performance, full-featured text search engine library written entirely in Java. It is a technology suitable for nearly any application that requires full-text search, especially cross-platform.

(from Lucene Site)





- It lets us work with documents that represent users
- It analyzes, tokenizes and indexes the different fields
- Using it together with JInterface, we built a Java node with a Lucene-backed Autocomplete gen\_server





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#### WHAT WE'VE FOUND?

- Processing is fast, communications are slow
- Lucene is not complete, but it's really flexible
- JInterface is very basic, not exactly flexible, but in fact extensible





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- Now that we have it, we can use Lucene in other Erlang applications
- We split autocomplete from Lucene logic
- Then we've created a Lucene Server for Erlang
- Still in its early stages, there's a lot to improve on that





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#### RESOURCES

#### ABOUT ME

- I'm @elbrujohalcon at Twitter
- I'm elbrujohalcon at Github

#### ABOUT INAKA

- Check our website: http://inaka.net
- And our Blog that's on the same site

#### ABOUT THIS TALK

 This talk is on Github: http://github.com/inaka/talks





# Thanks!

