



How to teach **elixir** to non-functional developers



Hi!

I am Leandro Bighetti

Elixir - Energy Industry - YouTube

Agenda

- The First 5 Seconds
- Becoming Dysfunctional
- Graduating

The First 5 Seconds

Part 1

A bigger problem

A bigger problem

Marketing ?



elixir

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```
defprotocol String.Inspect
  only: [BitString, List,

defimpl String.Inspect, for
  def inspect(false), do:
  def inspect(true), do:
  def inspect(nil), do:
  def inspect(""), do:

  def inspect(atom) do
```

Elixir is a dynamic, functional language designed for building scalable and maintainable applications.

Elixir leverages the Erlang VM, known for running low-latency, distributed and fault-tolerant systems, while also being successfully used in web development and the embedded software domain.

To learn more about Elixir, check our [getting started guide](#) and our [learning page for other resources](#). Or keep reading to get an overview of the platform, language and tools.



elixir

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**I don't have
concurrent
problems!**

**I don't have
concurrent
problems!**

- I have boring problems!

Phoenix



Productive. Reliable. Fast.

A productive web framework that
does not compromise speed and maintainability.

Build APIs, HTML 5 apps & more

See our guides

Productivity!

YouTube



**Hello World | Zero to Hero in
Elixir #1**

3,3 mil visualizações •

1 ano atrás

Quickstart!

Quickstart!

```
mix phx.new my_app
```

```
mix phx.server
```

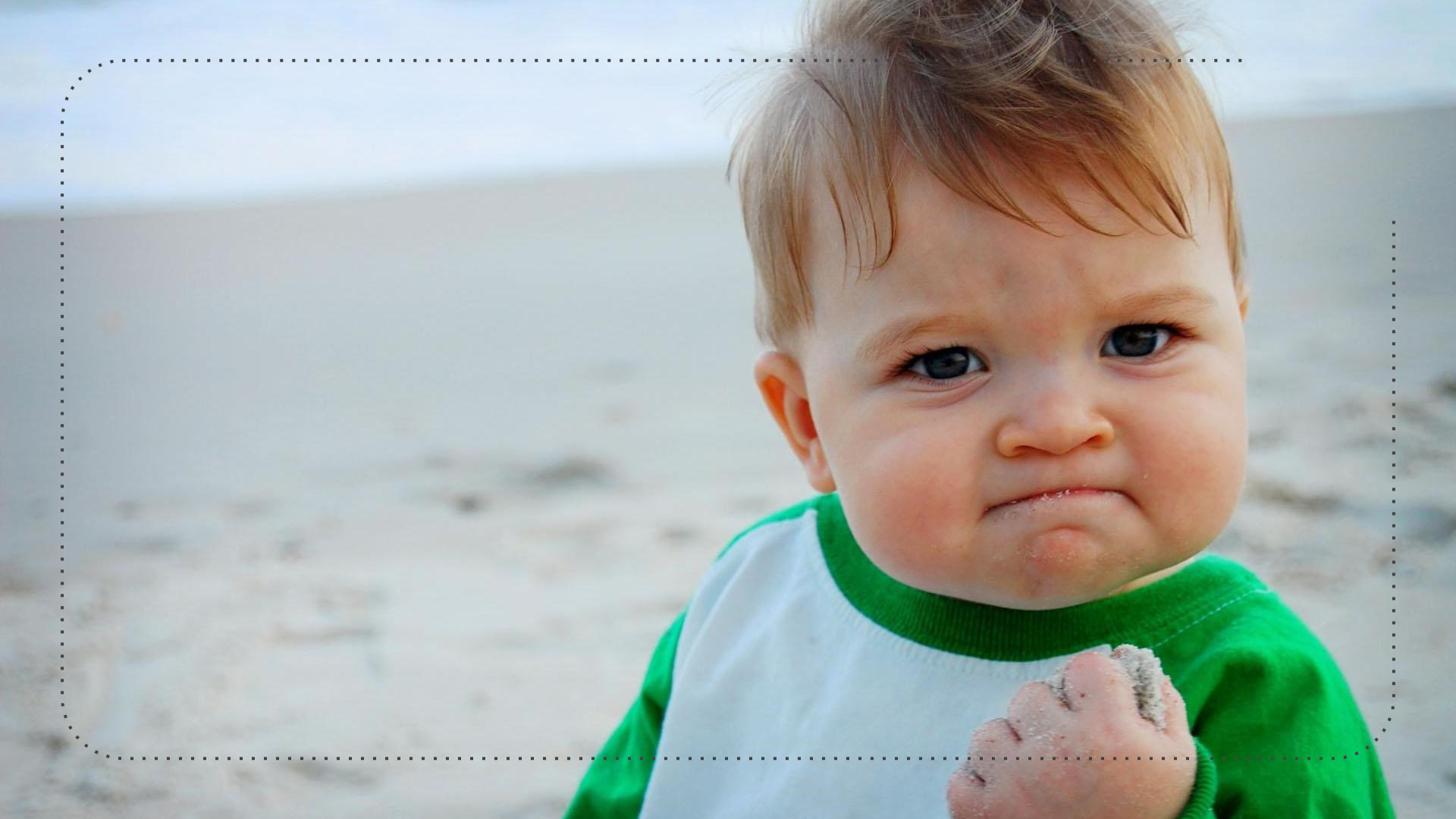



Phoenix Framework

[Get Started](#)

Welcome to Phoenix!

A productive web framework that
does not compromise speed and maintainability.



Becoming Dysfunctional

Part 2

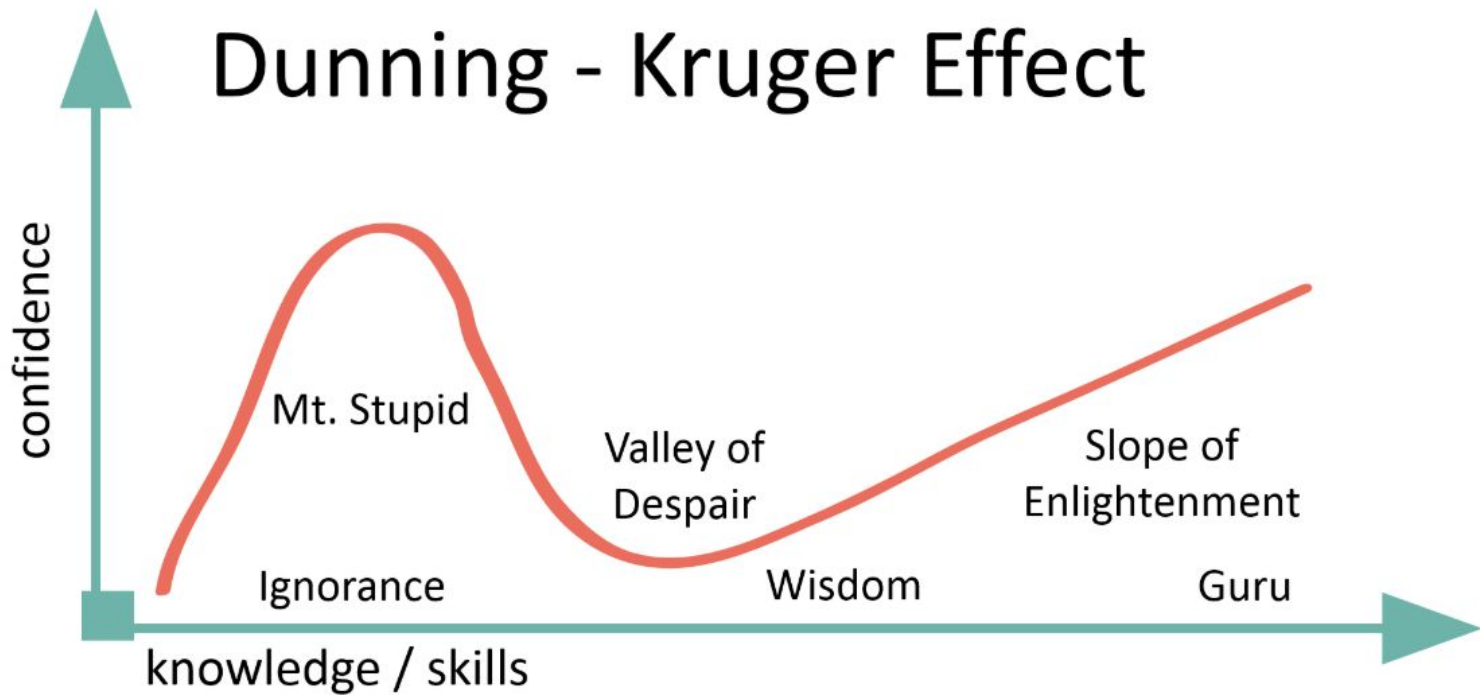
Newborn

- Breastfeeding

Newborn

- Breastfeeding
- **Learning a new skill is hard!**

Dunning - Kruger Effect



Strange questions?

Strange questions?

- Unknown unknowns
- XY Problem

Strange questions?

- Unknown unknowns
- XY Problem
- ... how do we solve this?

“

*No Retreat!
No Surrender!*

Teacher (Community)

- Empathy
- Patience

Pupil

- Build things!
- even books are secondary

**Elixir is not a
language,
It's an experience.**

Graduating

Part 3

Independence

- How to achieve it ?

Newborn

- Must master basic skills



“Get the fundamentals down otherwise the fancy stuff isn't going to work”

- Randy Pausch, The Last Lecture

Where to focus?

Where to focus?

- OO vs FP differences
- OO vs elixir differences

Elixir vs OO

- Immutability

Elixir vs OO

- Immutability
- Pattern Matching

Elixir vs OO

- Immutability
- Pattern Matching
- Recursion

Elixir vs OO

- Immutability
- Pattern Matching
- Recursion
- Pipe Operator

Elixir vs OO

- Immutability
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- Linked Lists

Elixir vs OO

- Immutability
- Pattern Matching
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- Linked Lists
- Erlang Processes

Elixir vs OO

- Immutability
- Pattern Matching
- Recursion
- Pipe Operator
- Linked Lists
- Erlang Processes
- Higher Order Functions

Higher Order Functions

- Enum.map
- Enum.filter
- & friends

Bottom line

“



Recap

- Do Not Lose Them
- Valley of Despair
- Independence Day



Thank you!

Questions?



<https://www.youtube.com/c/LittleAlchemistio>