

Erlang

2007-10-10

- Erlang Erlang

- Erlang

Erlang

- Programming Erlang
- Course.pdf
- Joes thesis 2003

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- Erlang
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Erlang

- 2007 has been a good year for Erlang
 - Amazon
 - Joe's book (Programming Erlang) is ranked #86 on the amazon.com bestseller list (category: computers & internet)
 - Google Trends
 - <http://www.google.com/trends?q=smalltalk%2C+erlang>
 - <http://www.google.com/trends?q=erlang%2C+ocaml>

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- Intel Keifer
32

2009/2010

- Sun Niagara
8 4 32

- What's all this fuss about Erlang?

- by Joe Armstrong Erlang

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PC

B/S C/S

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PC PDA

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Erlang /

- Erlang /

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GC

Erlang

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Erlang

- Erlang Focus

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- Erlang

- Focus

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- Erlang

Erlang

- COP
 - isolation
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- - fail-fast

Isolation

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PID

atomic

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Pid

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- Halt on failure
 - fail-fast
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 - If you can't do what you want to do, die.
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- &
- stable storage
- volatile storage
- “ ” transaction mechanism

Erlang

- Erlang

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$O(1)$

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binary search

- Erlang OOP

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- Erlang

- Erlang Binary

- C/C++ void*

- Buffer Offset N Fetch
<<_:Offset/binary, Fetch:N/binary, _/binary>> = Buffer.

- Erlang

- FileBuf

- { ok, FileBuf } = file:open(FilePath, read).

- Erlang OOP

– OOP —

Erlang
Erlang OOP

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- Java

```
stack stk = new stack();  
stk.push(10);  
val = stk.top();
```

- Erlang

```
Stk1 = stack:new(),  
Stk2 = stack:push(10, Stk1),  
Val = stack:top(Stk2).
```

Erlang

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PDA

PC

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PC

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2006

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Sun

Erlang

- Erlang /

Erlang is FP language

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|--|--------------------------|------------|
| | | |
| | Lisp, Erlang, Haskell | C/C++,Java |
| | Lambda | |
| | | |

Erlang

- FP
- FP
- FP“ ”

Erlang

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FP

Erlang

- Erlang, the next Java

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- Erlang

FP

FP

FP

- FP

Erlang

- - “ ”
 -
- - Java
 - Erlang

Q & A