
[Erlang/OTP/Hardware/Software/Firmware based Co-Design of Intelligent Telecommunication Systems]

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[I] Inspiration & Introduction:

“Erlang is a general purpose, concurrency-oriented functional programming language suited for fault-tolerant, distributed, soft real-time systems. It features strong dynamic typing, lightweight concurrency, eager evaluation and prolog like pattern matching. Erlang was developed in the 1980s at the Ericsson Computer Science Laboratory to address a then-unfulfilled need for telecommunications programming: a high-level, expressive language suitable for rapid development that offered the error recovery, concurrency, distribution and performance features required by telecommunications equipment. “

[Source: https://en.wikibooks.org/wiki/Erlang_Programming]


• Nirmal Tej Kumar
• Published 2018.

{ Source: @inproceedings{Kumar2018ExploringEM, title={Exploring Eclipse Mita in the Context of Embedded Systems/iot/bosch-XDK Iot Kit/ Jikes RVM a Simple Suggestion Using Research Virtual Machine Environment/iot/ Embedded Systems.}, author={Nirmal Tej Kumar}, year={2018} } }

“Erlang is a programming language designed by Ericsson and used by a number of companies such as WhatsApp, Amazon and Facebook. We had the chance to talk to its creator Joe Armstrong about its development and enduring popularity. Joe Armstrong was a long-time employee of Ericsson. He joined the company in 1985 and within a year had developed an early version of Erlang.”

[ Source: http://armstrongonsoftware.blogspot.com/ ]
[II] Erlang based TELECOM/OTP/YANNI Informatics Framework Implementation:

For Erlang programming tasks, we have used Eclipse IDE/JikesRVM or any other JVM could be used.

Please check the Eclipse IDE documentation for more information.

[Testing in progress at the time of submission]
[III] Conclusion/s With Future Perspectives:

Erlang is an excellent option in developing Telecom related applications involving Embedded Systems/IoT/HPC “Hi-End Mission Critical” applications.

******** Fine tuning is needed please check & satisfy yourself. Thanks – Dr.Nirmal. ********

[IV] Additional Information on related Erlang Software & Other Libraries Used/Useful:

https://www.erlang.org/
http://vixra.org/author/nirmal_tej_kumar
https://github.com/josephmisiti/awesome-machine-learning – YANNI Tool
https://news.ycombinator.com/item?id=14771104
https://en.wikipedia.org/wiki/RabbitMQ

[V] Acknowledgment/s:

Special Thanks to all who made this happen in my LIFE. Non-Profit Academic R&D.

[V] Some Useful Important References:


- Erlang Solutions (1 March 2013). "OTP, the Middleware for Concurrent Distributed Scalable Architectures" – via YouTube.
- "Erlang -- Introduction". erlang.org.


• Early history of Erlang by Bjarne Däcker


[ Source : Wikipedia ]

THE END.