
[ Exploring RVM – Research Virtual Machine Functionality on RASPBERRY PI Platforms ]

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[I] Inspiration + Introduction:

http://isabelle.in.tum.de/library/HOL/
http://isabelle.in.tum.de/library/HOL/HOL-Codegenerator_Test/index.html
https://alvinalexander.com/scala/scala-jdbc-connection-mysql-sql-select-example

[II] Informatics Framework for our R&D involving Raspberry PI/IoT/HPC/Mongo DB:

A Simple Algorithm I – Testing + Generating Scala Code Using HOL-Isabelle System
Approximate Algorithm to demonstrate some useful features.
Testing in Progress – Please Check & Satisfy Yourselves.
Our J-35 Vuxx.org based Technical Notes utilize this type of concepts involving cryo-EM Image Processing
Thanks - Dr.Nirmal

HOL - Libraries for Testing & Generating the Code in Scala
Testing the Scala/JVM/JikesRVM on Hardware/Software/Firmware Systems
inputs
HOL-Higher Order Logic-Isabelle System
install/launch
outputs
Raspberry PI/IoT/HPC Systems
fine tune
[Use any suitable JVM]
Mongo DB JDBC Scala
fine tune

JikesRVM-Research Virtual Machine
install/launch
Linux OS

HOL-Isabelle is little bit tricky in its usage.
Please Check before using
[ Not a Straight Forward Method - Requires Some Fine Tuning to suit your Computational Needs ]
[ http://jwxx.wuax.org/author/nirmal_tej_kumar - Please Check our cryo-EM Image Processing Algorithms ]

[ Figure I – Algorithm I – Simple Algorithm to Test the Code Generated Using HOL ]

*** We are presenting a general approach here. Requires fine tuning for Specific R&D Applications Using both JikesRVM & Jam VM to test our ideas involving the above mentioned Framework. There could be other options as well – Please Check.
Some Useful Information on Raspberry PI/IoT/HPC/Cloud:

https://www.raspberrypi.org/help/what-is-a-raspberry-pi
https://developer.bosch.com/web/xdk/cloud
https://www.raspberrypi.org/blog/oracle-java-on-raspberry-pi
https://eclipsesource.com/.../02/18/a-lightweight-java-application-server-on-raspberry-pi
https://www.oracle.com/technical-resources/articles/java/raspberrypi.html

[III] Acknowledgment/s:

Special Thanks to all my Friends/Mentors/Collaborators. Non-Profit R&D.

[IV] References (((via))) Vixra.org:

[a] http://www.vixra.org/author/nirmal_tej_kumar
[b] http://www.vixra.org/author/d_n_t_kumar
[e] https://www.semanticscholar.org/author/Nirmal-Kumar/12355503/suggest

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