Understanding & Testing of Fast Machine Words & Minsky Machines in Isabelle/HOL w.r.t Scala/Metascala/ JamVM/Java/JikesRVM - [RVM] Research Virtual Machine/GCSpy Using Smart Devices + IoT + HPC Heterogeneous Systems - A Suggestion.

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[I] Main Idea + Inspiration + Introduction :

Fast Machine Words in Isabelle/HOL - Andreas Lochbihler(B) - Institute of Information Security, Department of Computer Science, ETH Zurich,Zurich, Switzerland.

[II] R&D Informatics Framework Using HOL + RVM + Other HOL Libraries :

Please derive your own based on our already published online Short Technical Communications (((via))) Vixra.org

** https://www.vixra.org/author/nirmal_tej_kumar
** https://www.vixra.org/abs/1911.0447 && https://www.vixra.org/abs/1901.0445 - Minsky Machines.
** https://www.vixra.org/abs/1909.0490 - { Scala/EHR Systems ...could be very useful....for BIGDATA + NLP etc...Just fine tune the algorithms presented in this notes }

Please Check & Satisfy Yourselves.

[III] Important & Useful References :

[a] https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics - We have number of examples using these related concepts.Thanks.

[b] https://isabelle.in.tum.de/ && https://www.isa-afp.org/

[c] https://ethz.ch/content/dam/ethz/special-interest/infk/inst-infsec/information-security-group-dam/research/publications/pub2018/lochbihler2018_chapter_fastmachinewords.pdf

[**also please see** - https://www.isa-afp.org/browser_info/devel/HOL/HOL-Word/outline.pdf]
[https://www.isa-afp.org/browser_info/current/AFP/Native_Word/document.pdf]

[d] https://www.jikesrvm.org/ && https://www.cs.kent.ac.uk/projects/gc/gcspy/

[e] https://scala-lms.github.io/tutorials/ && https://www.scala-lang.org/

[f] https://www.programmersought.com/article/557854255/ -> Scala programming and some useful information.

[g] https://www.gavstech.com/why-scala-for-big-data-and-machine-learning/

[h] https://github.com/lihaoyi/Metascala - Scala based Virtual Machine for excellent testing of concepts.

[i] https://blog.knoldus.com/scala-iot-first-basic-iot-application-using-scala-on-raspberrypi/

[j] https://www.isa-afp.org/entries/Minsky_Machines.html

[IV] Acknowledgment/s :

Sincere Thanks to all WHO made this happen in my LIFE. Non-Profit R&D.Inspire Others Always.
Thanks for reading our Short Technical Notes.

[V] Conclusion/s + Future Perspectives :

HOL based Novel concepts are always useful in designing better software or addressing important issues in JVM related computing environments involving : Smart Devices + IoT + HPC Heterogeneous Systems.

We are testing all these promising concepts in the context of Advanced Healthcare Information Systems involving :

Medical Imaging + Bio-informatics DATASETS w.r.t COVID-19 R&D.

Rigorous Testing in Progress @ the time of submission.Hope many will be inspired and come up with their own approaches based on one of our pioneering works.

[THE END]