B0 System — Software Construction & Deployment Kit Testing With C/OCaml/LLVM/Ruby/mruby/qrng/Machine Learning Options Using Raspberry PI/Bosch XDK IoT /HPC Systems in Heterogeneous Environments.

[Exploring OCaml + Ruby + rocaml → Testing B0 System w.r.t Image Processing]

Nirmal – Informatics R&D – USA/UK/Israel/BRICS Group of Nations.
    Current Member – ante Inst UTD Dallas TX USA.
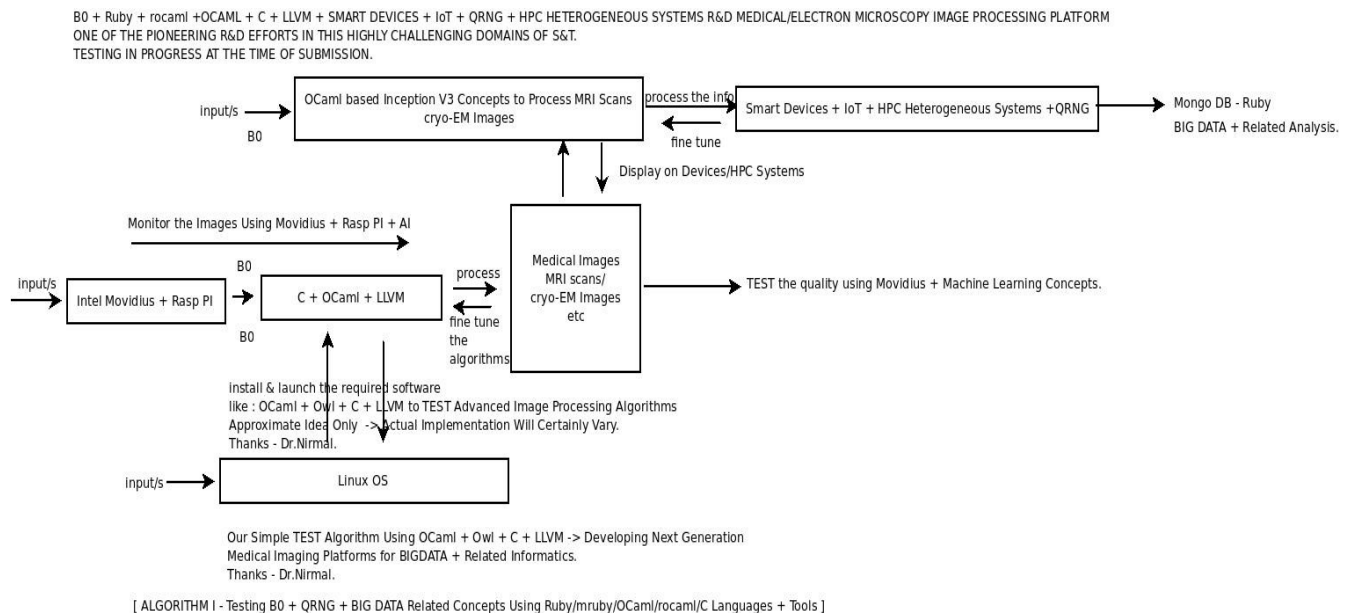   Contact_info – hmfg2014@gmail.com

[I] Main Idea + Inspiration + Introduction :

https://erratique.ch/software/b0/doc/
https://www.linuxjournal.com/content/whats-new-ruby-world-rocaml
https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/OCaml-C-llvm-Inceptionv3-Nir-21.pdf

[II] R&D Informatics Framework Using Software + Hardware :

B0 + Ruby + rocaml +OCAML + C + LLVM + SMART DEVICES + IoT + QRNG + HPC HETEROGENEOUS SYSTEMS R&D MEDICAL/ELECTRON MICROSCOPY IMAGE PROCESSING PLATFORM ONE OF THE PIONEERING R&D EFFORTS IN THIS HIGHLY CHALLENGING DOMAINS OF S&T.
TESTING IN PROGRESS AT THE TIME OF SUBMISSION.

input/s
B0
OCaml based Inception V3 Concepts to Process MRI Scans cryo-EM Images
process the info
Smart Devices + IoT + HPC Heterogeneous Systems +QRNG
Mongo DB - Ruby
BIG DATA + Related Analysis.
fine tune
Display on Devices/HPC Systems

Monitor the Images Using Movidius + Rasp PI + AI
B0
input/s
Intel Movidius + Rasp PI
C + OCaml + LLVM
B0
process
fine tune the algorithms
Medical Images MRI scans/ cryo-EM Images etc
TEST the quality using Movidius + Machine Learning Concepts.

install & launch the required software
like : OCaml + Owl + C + LLVM to TEST Advanced Image Processing Algorithms
Approximate Idea Only -> Actual Implementation Will Certainly Vary.
Thanks - Dr.Nirmal.

input/s
Linux OS

Our Simple TEST Algorithm Using OCaml + Owl + C + LLVM -> Developing Next Generation
Medical Imaging Platforms for BIGDATA + Related Informatics.
Thanks - Dr.Nirmal.

[ALGORITHM I - Testing B0 + QRNG + BIG DATA Related Concepts Using Ruby/mruby/OCaml/rocaml/C Languages + Tools]

[Figure I – R&D Informatics Framework Using Above Mentioned Software Tools]

https://github.com/tejdnk-2019-ShortNotes – Lot of examples from us.
https://github.com/b0-system – Notes on B0 System.

[III] Acknowledgment/s :

Non-Profit R&D. Inspire Others Always. Sincere Thanks to all WHO made this happen.

[THE END]