Arm-based Xilinx Zynq UltraScale +™ MPSoC Development Board Probing Using Ruby/mRuby/C Language/QRNG-Devices & Services/CLIPS-ruby Expert System [ES] / E Theorem Prover [ETP] / Java / JVM → An Innovative R&D Approach To TEST Next Generation IoT/Image Processing Informatics Framework w.r.t → { Space + Medicine + Telecom + High Performance Computing [HPC] Heterogeneous Systems – A Short Technical Note }

[Exploring Multi-disciplinary Hardware/Software/Firmware Approach → Designing Advanced Image Processing Algorithms Using Ruby & C/C++]

Dr.Nirmal – Informatics R&D – USA/UK/Israel/BRICS Group of Nations.

Current Member – ante Inst UTD Dallas TX USA.

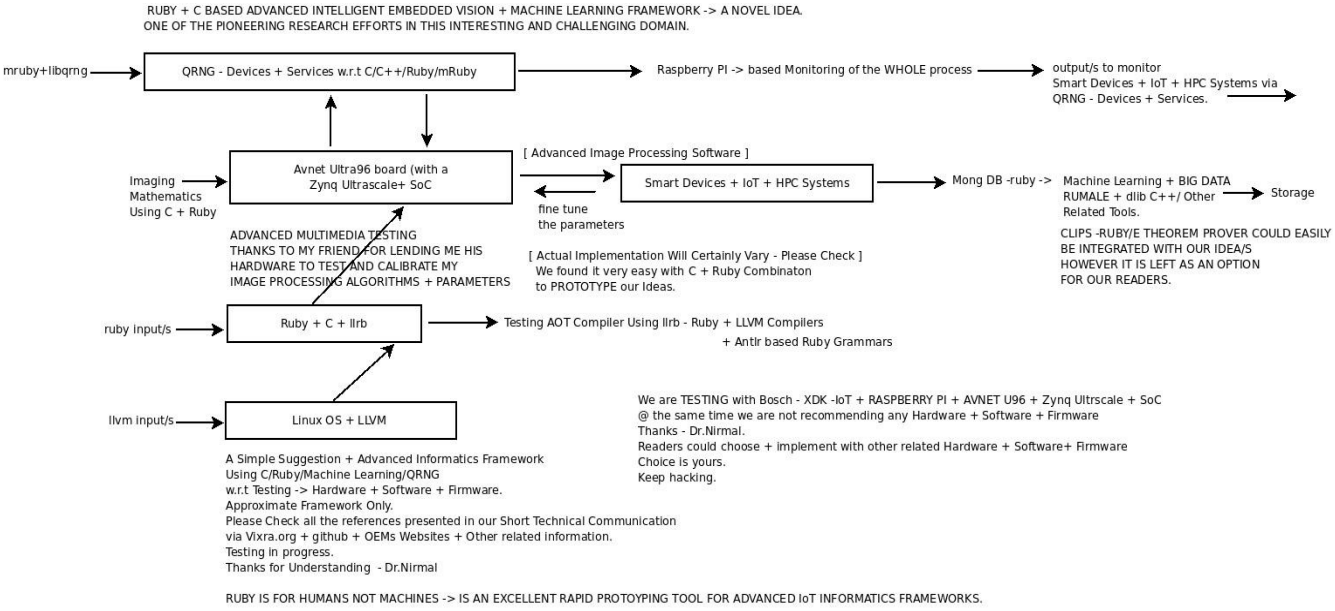
Contact_info – hmfg2014@gmail.com

[I] Main Idea + Inspiration + Introduction : [Embedded Vision & Machine Learning + Next Generation IoT Informatics]

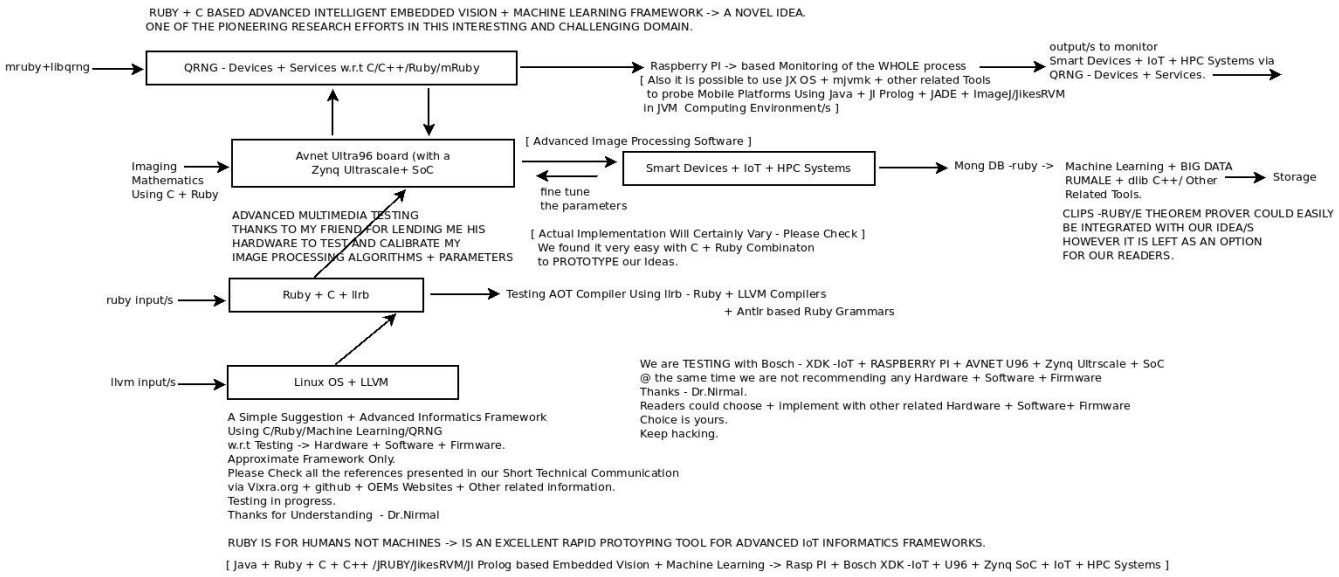
https://www.xilinx.com/support/documentation/white_papers/wp497-multimedia.pdf
https://www.xilinx.com/products/silicon-devices/soc/zynq-ultrascale-mpsoc.html#productTable
https://www.avnet.com/wps/portal/us/products/new-product-introductions/npi/ultra96-v2-Industrial-temperature-grade-single-board/

***** Avnet Ultra96-V2 Face Detection Tutorial – Hackster.io → https://www.hackster.io/karan-kantharia && https://www.hackster.io/AlbertaBeef
[Published May 13, 2020]

[II] R&D Informatics Framework → To TEST U96 Board & its Related Applications :



[Testing Avnet Ultra96 board (with a Zynq Ultrascale + SoC) → Advanced IoT/Image Processing Informatics R&D Applications]
NOT ALL THE DETAILS ARE SHOWN HERE – PLEASE CHECK THE LITERATURE.
[Figure I – Our Simple Algorithm I]



[Testing Avnet Ultra96 board (with a Zynq Ultrascale + SoC) → Advanced IoT/Image Processing Informatics R&D Applications]
NOT ALL THE DETAILS ARE SHOWN HERE – PLEASE CHECK THE LITERATURE.
[Figure II – Our Simple Algorithm II]

[III] Important + Useful References :

[a] https://www.ruby-lang.org/en/

[b] https://mruby.org/

[c] https://www.idquantique.com/random-number-generation/overview/

[d] https://qrng.physik.hu-berlin.de/download

[e] https://github.com/cremno/mruby-libqrng

[f] https://medium.com/@IuriiGurzhii/yukihiro-matsumoto-ruby-is-designed-for-humans-not-machines-5e16511219c6

[g] https://evrone.com/yukihiro-matsumoto-interview

[h] **White Paper: Zynq UltraScale+ MPSoC** → By: Yashu Gosain and Alok Gupta. [WP497 (v1.0) October 23, 2017]

[i] LIT# Ultra96-V2-HW-User-Guide-rev-1-0-V1 – AVNET.

[j] http://avnet.me/ultra96-v2 → For more information please visit.

[k] https://in.element14.com/avnet/aes-acc-u96-jtag/usb-to-jtag-uart-pod/dp/2915522

[l] https://github.com/tejdnk-2019-ShortNotes → Lot of Information online.

[IV] Acknowledgment/s : Sincere Thanks to all WHO made this happen in my LIFE. Non-Profit R&D.
Keep Probing Next Generation IoT Informatics.
Inspiring Others is ALWAYS good.

[V] Conclusion : One of the Pioneering R&D Efforts in this Challenging Domain. More to follow.

[THE END]