[ITensor + a Quantum Device + dlibC++Machine Learning Library] to Probe [Hardware-Software-Firmware] Interaction with [Critical Infrastructure + Smart Device + IoT + HPC] in the Context of Advanced Medical Imaging - A Novel Suggestion in Designing Intelligent Wireless Medical Imaging Platform Using Related Machine Learning Informatics.

"If you cannot explain something in simple terms, you don't understand it. The best way to learn is to teach. " - Prof.Richard Feynman.

Nirmal Tej Kumar

Independent Consultant   Informatics/HPC/Photonics/Nanotechnology – R&D.
Current Member   ante Inst,UTD,Dallas,TX,USA.
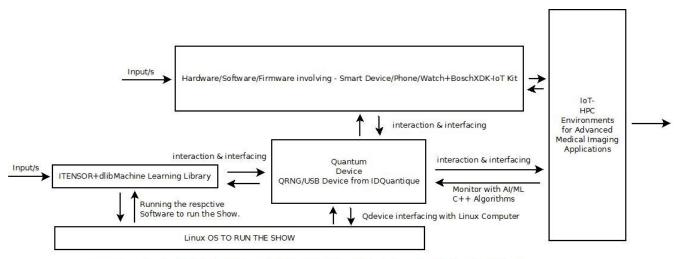*email id   hmfg2014@gmail.com*

[I] Introduction & Implementation of Informatics/Medical Image Processing Framework :

"ITensor—Intelligent Tensor—is a C++ library for implementing tensor network calculations. See the list of recent papers using ITensor.
Features include:

- Index ordering is handled automatically
- Full-featured matrix product state and DMRG layer
- Quantum number conserving (block-sparse) tensors; same interface as dense tensors
- Complex numbers handled lazily: no efficiency loss if real
- Easy to install; only dependencies are BLAS/LAPACK and C++17
- Interface uses friendly, productive subset of the C++ language "

[Source : https://itensor.org/] **For other information- please read our references at the end. Thanks.**

Input/s → Hardware/Software/Firmware involving - Smart Device/Phone/Watch+BoschXDK-IoT Kit

interaction & interfacing

IoT-HPC Environments for Advanced Medical Imaging Applications

interaction & interfacing

Input/s → ITENSOR+dlibMachine Learning Library

interaction & interfacing

Quantum Device QRNG/USB Device from IDQuantique

interaction & interfacing

Monitor with AI/ML C++ Algorithms

Running the respctive Software to run the Show.

Qdevice interfacing with Linux Computer

Linux OS TO RUN THE SHOW

Approximate Imaging & Informatics Framework for Designing & Developing Advanced Medical Imaging Platform
Not endorsing any Commercial Products/Software here.Just to demonstrate a feasible Imaging Platform to probe Medical Images with cryptography.
PLEASE READ CHECK & SATISFY YOUR SELVES BEFORE USING OUR FRAMEWORKS & DESIGN.
Testing in Progress at thetime of submission.
Non-Profit R&D.
Thanks - Nirmal.

[Figure I – Our Total Overview of Medical Imaging Platform With IoT/HPC/QRNG]

[II] Acknowledgment/s :

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

[III] Reference/s :

[a] http://vixra.org/author/nirmal_tej_kumar

[b] http://vixra.org/author/nirmal

[c] http://vixra.org/author/n_t_kumar

[d] http://vixra.org/author/d_n_t_kumar

[e] https://itensor.org/

[f] http://dlib.net/

[g] https://www.idquantique.com/quantum-technologies-matter-critical-infrastructure-iot/

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

[i] https://www.idquantique.com/random-number-generation/products/quantis-random-number-generator/

[j] https://www.irb.hr/eng/News/On-Demand-Optical-Quantum-Random-Number-Generator-with-Ultra-Fast-Response

[k] *https://www.quantiki.org/wiki/quantum-random-number-generators*

[l] *https://www.idquantique.com/single-photon-systems-october-2018/*

" Unless you try to do something beyond what you have already mastered, you will never grow". Ronald E Osborn.

THE END.