

**[ Julia+Flux-ML Library+Polly-LLVM+QRNG Services/Quantum Devices+qrng library ] in the Context of Understanding [ Machine Learning-ML/Internet of Things-IoT/HPC - High Performance Computing ] based Advanced Medical Imaging Software R&D - A Simple & Useful Suggestion.**

Nirmal Tej Kumar

Independent Consultant     Informatics/Imaging/AI/Photonics/Nanotechnology/HPC R&D.  
 R&D Collaborator         USA/UK/Israel/South Korea/BRICS Group of Nations.  
 Current Member             ante Inst,UTD,Dallas,TX,USA.  
 email id                     [hmfg2014@gmail.com](mailto:hmfg2014@gmail.com)

**[I] Inspiration + Introduction :**

<http://vixra.org/pdf/1909.0170v1.pdf>

<http://vixra.org/pdf/1908.0598v1.pdf>

<http://vixra.org/pdf/1907.0306v1.pdf>

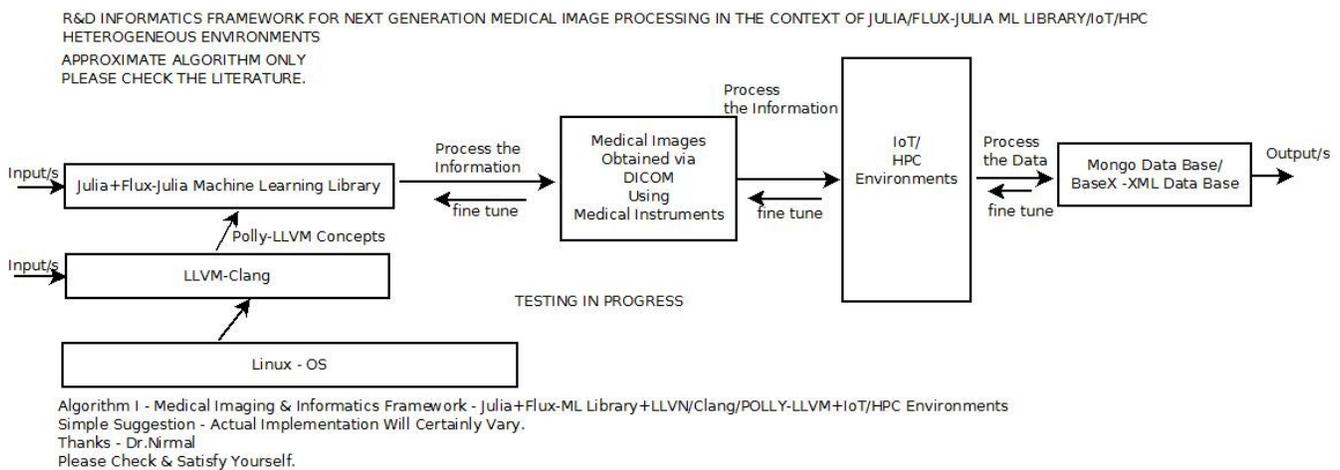
<http://vixra.org/pdf/1908.0301v1.pdf>

<http://vixra.org/pdf/1909.0102v1.pdf>

<http://www.vixra.org/abs/1908.0012>

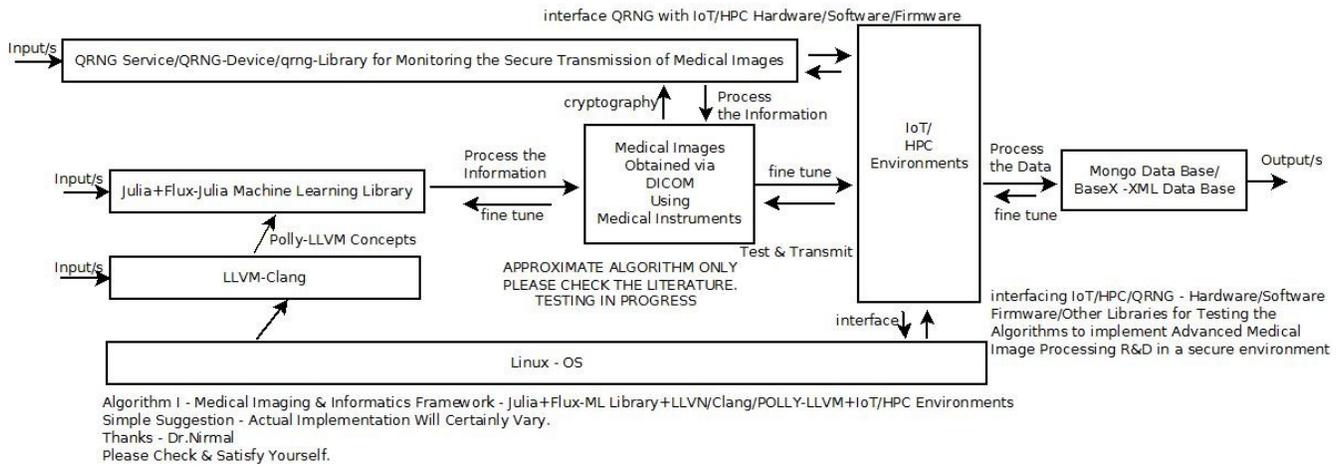
<http://www.vixra.org/abs/1907.0201> – Some Notes on Julia

**[II] R&D Medical Images Processing Informatics Framework Implementation :**



**[ Figure I – Algorithm I – Medical Image Processing& Informatics Framework based on Julia/Flux-ML+LLVM ]**

R&D INFORMATICS FRAMEWORK FOR NEXT GENERATION MEDICAL IMAGE PROCESSING IN THE CONTEXT OF JULIA/FLUX-JULIA ML LIBRARY/IoT/HPC HETEROGENEOUS ENVIRONMENTS



[ Figure II – Algorithm II – Medical Image Processing& Informatics Framework based on Julia/Flux–ML+LLVM ]  
Understand QRNG Services/Devices before using the Algorithm II.Thanks.

[III] Related R&D Information on Mathematics+Software Used/Useful :

[a] <https://julialang.org/>

[b] <http://polly.llvm.org/projects.html>

[c] [http://www.vixra.org/author/nirmal\\_tej\\_kumar](http://www.vixra.org/author/nirmal_tej_kumar)

[d] [http://www.vixra.org/author/n\\_t\\_kumar](http://www.vixra.org/author/n_t_kumar)

[e] [http://www.vixra.org/author/d\\_n\\_t\\_kumar](http://www.vixra.org/author/d_n_t_kumar)

[f] <http://www.vixra.org/author/nirmal>

[g] <https://www.semanticscholar.org/author/Nirmal-Tej-Kumar/12354503/suggest>

[h] [qrng.physik.hu-berlin.de](http://qrng.physik.hu-berlin.de) – This is a joint R&D effort of PicoQuant GmbH and the Nano-Optics groups at the Department of Physics of Humboldt University, Germany.

<https://www.picoquant.com/news/item/high-bit-rate-quantum-random...>

<https://quantiki.org/wiki/quantum-random-number-generators>

[qrng.anu.edu.au/About.php](http://qrng.anu.edu.au/About.php)

<https://www.idquantique.com>

<https://pypi.org/project/qrng/> – A Quantum Random Number Generator using IBM's Qiskit.

<https://juliacomputing.com/domains/ml-and-ai.html>

<https://fluxml.ai/Flux.jl> – ML/AI – Julia based Libraries.

**[IV] Acknowledgment/s :**

Special Thanks to my Friends+Mentors+Collaborators Worldwide. Non-Profit R&D.

**[V] Conclusion/s+Future Perspectives -**

“Julia is fast! Julia was designed from the beginning for [high performance](#). Julia programs compile to efficient native code for multiple platforms via LLVM”. Hence, this simple presentation on Using [ Julia/Flux-ML/Poly-LLVM/QRNG ] Related Concepts in the Context of [ ML/IoT/HPC/Medical Images Processing ].

**[ THE END ]**