

[IronRuby+.NETSDK/Linux/mruby qrng library/CLIPS .NET Expert Systems Software/CLIPS] Framework in the Context of Designing Next Generation Medical Image Processing Heterogeneous Software and Monitoring Using [QRNGService/QRNG-Device] based on Machine Learning Concepts – An Important but Simple R&D Suggestion for [IoT/HPC] Image Processing Software Architecture Implementation.

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[I] Inspiration & Introduction :

“ IronRuby is an [open-source](#) implementation of the Ruby programming language which is tightly integrated with the .NET Framework. IronRuby can use the .NET Framework and Ruby libraries, and other .NET languages can use Ruby code just as easily. “ – [Source : <http://ironruby.net/>]

“.NET Free. Cross-platform. Open source. A developer platform for building mobile apps.” –Supported on Windows, Linux, and macOS.

[Source : <https://dotnet.microsoft.com/download/linux-package-manager/rhel/runtime-current>]

“[Medical image reconstruction using the .NET Framework](#) “ –

[Source : https://fosdem.org/2019/schedule/event/dotnet_medical_imaging]

<https://www.leadtools.com/sdk/image-processing/medical>

<https://www.leadtools.com/sdk/medical/medical-viewer>

[hu-berlin.de – High Bit Rate Quantum Random Number Generator ...](#) qrng.physik.hu-berlin.de

<https://qrng.physik.hu-berlin.de/download>

[Source : www.fairmat.com/plugins/documentation/qrng-uniberlin PDF file]

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

<https://www.sciencedirect.com/science/article/pii/S0010465512002780>

<https://github.com/SeppPenner/QRNGHuBerlinTest> – C# Language– Could be very much useful.

[QRNGHuBerlinTest is a project written in C# 4.8. The software is used to connect to the **HU Berlin** quantum computer. – SeppPenner/QRNGHuBerlinTest]

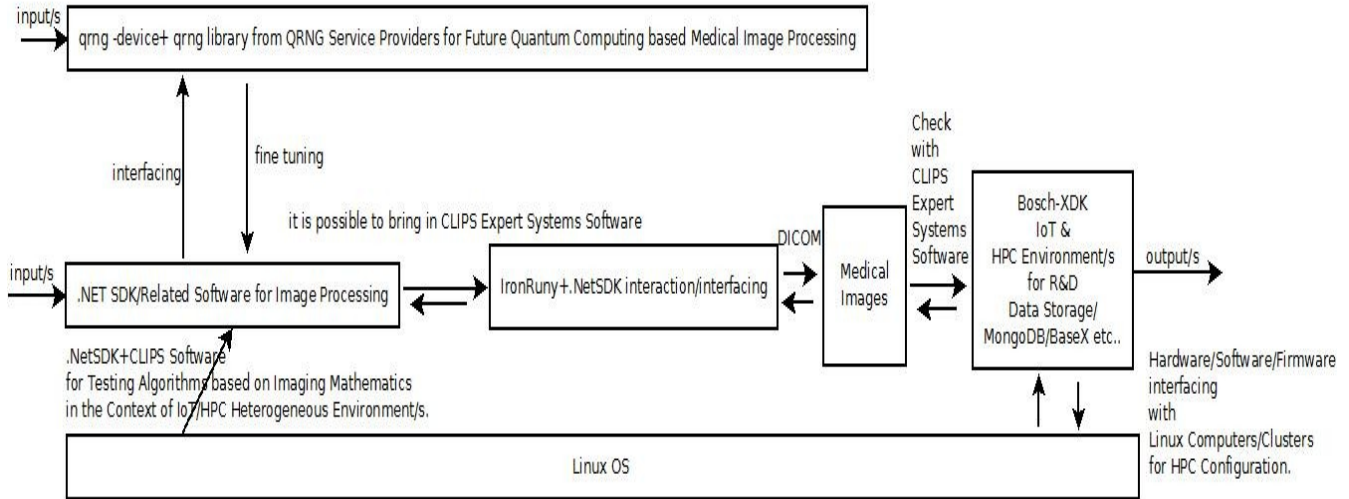
<https://www.idquantique.com> – QRNG Devices for your R&D Domains.

<https://xdk.bosch-connectivity.com> – Bosch XDK-IoT Device + Cloud based informatics etc.....

<https://sourceforge.net/projects/clipsrules/files/latest/download>

[III] Novel Test Bed → R& D Image Processing + Informatics Framework With Simple Implementation :

.NETSDK+CLIPS EXPERT SYSTEMS SOFTWARE+QRNG+IronRuby+IoT/HPC - Heterogeneous Environment/s
 Testing Algorithms - Novel Test Bed - for Advanced Medical Image Processing Informatics Framework
 General Approach - Not Specific to any method/s - Other alternatives exist - Please Check.



.NET SDK/CLIPS EXPERT SYSTEMS SOFTWARE FOR TESTING NOVEL IMAGE PROCESSING ALGORITHMS
 ONE OF THE PIONEERING R&D WORKS in the Medical Informatics Domain.
 Actual Implementation will certainly vary - Please Check - Thanks - Dr.Nirmal
 Approximate Suggestion Only.

[Figure I – Algorithm I – Medical Image Processing Framework – Testing in Progress With Some Results]

{ .NETSDK/Linux +CLIPS+IronRuby+mrubyqrng lib+qrng device+IoT/HPC+MongoDB+BaseX based Advanced Medical Image Processing & Informatics Framework for our R&D }

[Some Specific Information that could be useful in thinking about .NET Medical Image Processing Algorithms :]

<https://www.microsoft.com/en-us/research/project/medical-image-analysis>

<https://github.com/topics/medical-imaging>

<https://www.microsemi.com/applications/medical-instrumentation/imaging>

<https://www.componentsource.com/product/leadtools-medical-imaging>

www.yiigo.com/guides/csharp/how-to-read-dicom.shtml - **C#.NET code to read, process DICOM medical images.**

<http://www.clipsrules.net/index.html> – CLIPS Expert Systems Software – **that was used in NASA.**

https://sourceforge.net/projects/clipsrules/files/CLIPS/6.40_Beta_2/

Bsoft-Ruby/ruby Based Machine Learning(ml)-LLVM-Tcl/Tk Based Analysis of Cryo-em Images Using Mathematical Software in Probing the Nano-Bio Systems – an Interesting Insight Into Ruby/ruby-ML and Tcl/Tk Interfacing in the Context of Electron Microscopy Images – <http://vixra.org/abs/1906.0062>

Exploring & Examining Cryo-EM Images in the Context of Helical Protein Polymers/Bio-Polymers for Helical Reconstructions Using Ruby Language/Machine Learning/Image Processing/ruby-LLVM Informatics Framework. –

<http://vixra.org/pdf/1903.0105v1.pdf>

[III] Related Information & References on Mathematics+Software Used ((via)) Vixra.org :

[a] [vixra.org > author > nirmal_tej_kumar](#)

[b] [vixra.org > author > nirmal](#)

[c] [vixra.org > author > n_t_kumar](#)

[d] [vixra.org > author > d_n_t_kumar](#)

[IV] Acknowledgment/s :

Special Thanks to all WHO made this happen in my LIFE. Non-Profit R&D.

[THE END]