An Interesting+Promising Suggestion based on [CLIPS/Psyclone] related AI Frameworks & their [Extension + Interfacing] with Ruby-LLVM Software in the Context of IoT/HPC Heterogeneous Image Processing Environment/s – Let us Happily Explore Ruby Language towards Designing Advanced Expert Systems for Multi-disciplinary R&D involving Next Generation Smart Devices [Hardware/Software/Firmware].

[C/C++/Ruby/LLVM based AI Revolution → Advanced Medical Image Processing]

Nirmal Tej Kumar

Independent Consultant Informatics/Photonics/Imaging/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

[I] Inspiration+Introduction:

<u>http://www.clipsrules.net/index.html</u> - **CLIPS Software in C Language**.

<u>https://cmlabs.com/psyclone</u> – **Psyclone Software in C++ Language**.

https://github.com/Homebrew/homebrew-core/blob/master/Formula/llvm.rb

https://www.ibm.com/developerworks/library/os-extendruby

https://www.slideshare.net/tristanpenman/extending-ruby-using-cpp

https://github.com/SketchUp/ruby-c-extension-examples

chris911.github.io/blog/2014/08/10/writing-a-ruby-gem-with-c-extension

https://www.amberbit.com/blog/2014/6/12/calling-c-cpp-from-ruby

https://www.prasunanand.com/ruby-c-extensions/2017/06/23/gsoc17-ruby-c...

aaronbedra.com/extending-ruby

blogs.harvard.edu/hoanga/2006/12/14/getting-a-ruby-c-extension-to-compile-on-windows

https://rubyinstaller.org/add-ons/devkit.html

https://llvm.org && https://en.wikipedia.org/wiki/LLVM

https://github.com/llvm && https://clang.llvm.org

 $\textit{https://www.ruby-lang.org} \ \&\& \ \textit{https://en.wikipedia.org/wiki/Ruby_(programming_language)}$

https://www.geeksforgeeks.org/ruby-programming-language

https://www.quora.com/What-is-the-Ruby-language-and-in-which-field-is-it-used

https://en.wikipedia.org/wiki/Ruby_on_Rails

https://hokstad.com/compiler

https://www.reddit.com/r/ruby/comments/ck7rno/ruby_to_design_a_compiler

https://github.com/charles-l/koona

https://developer.ibm.com/code/2017/03/01/ruby-omr-jit-compiler-whats-next

https://www.infoworld.com/article/3245665/whats-new-in-ruby.html

https://github.com/AndrewRadev/image-processing

https://www.math.wisc.edu/~angenent/preprints/medicalBAMS.pdf. PDF file

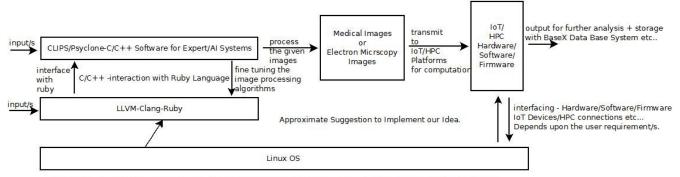
https://en.wikipedia.org/wiki/Medical_image_computing

https://rubygems.org/gems/image_processing/versions/1.9.3

 $www.cs.umd.edu/{\sim}hjs/pubs/medicalimage papers/Tahmoush SPIE o7b.pdf.~ {\tt PDF}~ file$

[II] [C/C++/Ruby/LLVM/Ilvm-rb] - AI Frameworks Based Informatics Platform Design Implementation :

Advanced Image Processing & Informatics Framework Involving - C/C++/LLVM/Ilvm-rb/CLIPS/PSYCLONE - Software Tools for our R&D.



Algorithm I - Advanced Image Processing +Informatics Framework Using CLIPS+PSYCLONE+RUBY+LLVM/llvm-rb in the Context of IoT/HPC Heterogeneous Environment/s.

Actual Implementation will certainly vary.

Testing in Progress with some promising results.

Using Ruby-LLVM has many advantages in IoT/HPC scenario.

Please Check & Satisfy Yourselves - Read all the references presented in our Short Communication.

Thanks - Dr.Nirmal

[Figure I – Algorithm I – Advanced Rapid Prototyping LLVM-Ruby based AI Image Processing Platform]
Interested in creating a new AI foundation for Complex & Interactive Systems.

**** Some useful information based on Ruby in the context of Medical Image Processing R&D :

https://github.com/dicom/ruby-dicom

dicom.github.io/ruby-dicom/publications.html

[III] Some Useful R&D Information (((((via))))) Vixra.org:

www.vixra.org/author/nirmal_tej_kumar

www.vixra.org/author/n_t_kumar

www.vixra.org/author/d_n_t_kumar

www.vixra.org/author/n_t_kumar

[IV] Acknowledgment/s:

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

[v] Reference/s:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2039808