

# **Probing + Understanding -> Towards Obtaining Excellent Quality MRI Images Using DICOM + Expert Systems -> Testing Smart Devices + QRNG/mruby + IoT + HPC Systems -> in the Context of Using CLIPS-Ruby Engine + ImageJ + ImageJ/MRI Plug-in + JikesRVM-Research Virtual Machine + JRuby.**

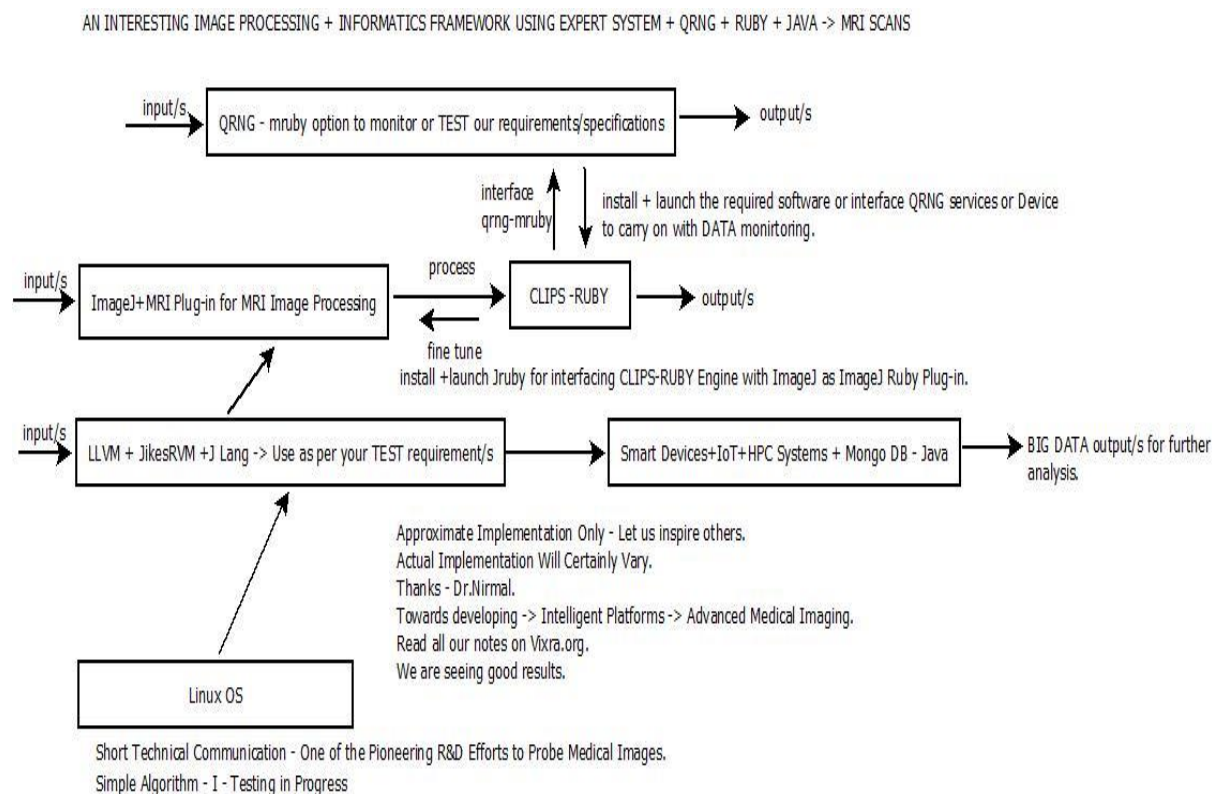
[ Exploring Dynamic Data Race Detection Algorithms for Image Processing R&D ]

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[I] Abstract + Main Idea + Inspiration + Informatics R&D Framework :



[ Figure I – Expert System – Image Processing Framework ]

“Dynamic data race detection incurs heavy runtime overheads. Recently, many sampling techniques have been proposed to detect data races. However, some sampling techniques (e.g., Pacer) are based on traditional happens-before relation and incur a large basic overhead. Others utilize hardware to reduce their sampling overhead (e.g., DataCollider) and they, however, detect a race only when the race really occurs by delaying program executions. “

[ Source - <https://dl.acm.org/doi/10.1145/2950290.2950310> ]

**[II] Software Tools for our R&D Informatics Framework :**

- [a] <https://polyglot-compiler.github.io/JLang/developer-guide.html>
- [b] <https://www.jruby.org>
- [c] <https://imagej.nih.gov/ij/index.html> + <https://imagej.nih.gov/ij/plugins/mri-analysis.html>
- [d] <http://www.wmis.org/abstracts/2013/data/papers/P267.htm#>
- [e] <https://imagej.net/MRIPerfusion.html>
- [f] <https://github.com/bfoz/clips-ruby>
- [g] <https://qrng.physik.hu-berlin.de/>

**[III] Our Related References via Vixra.org + Other Sources :**

- [a] <https://github.com/tejdkn-2019-ShortNotes/Testing-EM-Images>
- [b] <https://deepai.org/profile/tejdkn-deepai>
- [c] <https://vixra.org/abs/1803.0124>
- [d] <https://www.semanticscholar.org/author/Nirmal-Kumar/12354503>
- [e] <https://vixra.org/abs/1907.0306> - mruby/qrng etc....

**[IV] Acknowledgement/s :**

Sincere Thanks for the encouragement received from all my Mentors + Friends + Collaborators.

Non-Profit R&D.

**[ THE END ]**