

# JikesRVM + JI Prolog + ImageJ/ImageJ Helmholtz Plug-in for Probing COVID-19 Advanced Imaging & Informatics R&D.

[ Exploring Compiler DNA Related Concepts Using JikesRVM – Research Virtual Machine ]

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## [I] Abstract:

Probing Java Based JI Prolog + Image J/Helmholtz Plug-in W.r.t Electron Microscopy(EM) Images & Image Processing – A Short Technical Note & Suggestion for Rapid Prototyping. Useful to Probe Both Medical Images & EM based Images in the Context of COVID-19 Imaging & Informatics Frameworks.JikesRVM related Image Processing Software is highly useful in [ IoT/HPC/Smart Devices involving ] Multi-disciplinary R&D Domains →

**“Write Once & Run Anywhere”. → is simply easy and convenient.**

[ index words/key words ] : Guess Guess n Guess.....

## [II] Inspiration + Introduction :

“The COVID-19 virus and its polyproteins” – THE HINDU – Dated 18-April-2020 by D. Bala Subramanian.

“<https://doi.org/10.1002/jmv.25681>)” – Journal of Medical Virology.

“Journal of Medicinal Chemistry, 2016, 59 (6595–6628) → (10.1021/acs.jmedchem.5b01461)”

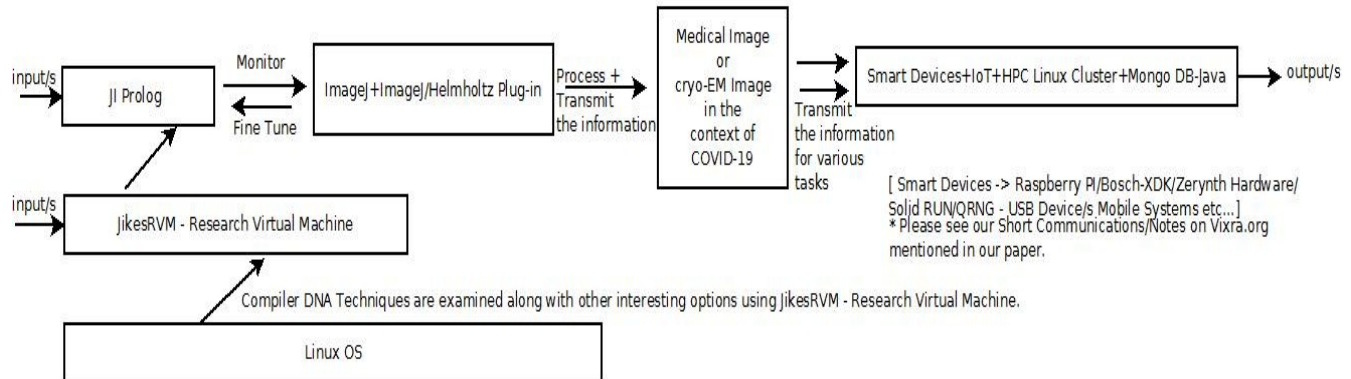
“Drug Discovery Today → (<https://doi.org/10.1016/j.drudis.2020.01.015>).”

“<https://www.jikesrvm.org/JavaDoc/org/jikesrvm/adaptive/recompilation/CompilerDNA.html>”

### [III] R&D Informatics Framework to Probe Medical/EM Images :

A SIMPLE JAVA BASED ADVANCED IMAGE PROCESSING & INFORMATICS FRAMEWORK USING PROLOG FOR NEXT GENERATION  
IoT/HPC HETEROGENEOUS COMPUTING ENVIRONMENTS.

COVID-19 is a HIGHLY INTERESTING CHALLENGE TO THE ENTIRE WORLD. We need very advanced AI based Software Tools to meet the Challenges involved.



Our Interesting Algorithm to TEST SOME interesting Features of JikesRVM in the Context of Medical Imaging & Cryo-EM Imaging R&D.  
Please Check the Literature before commencing R&D Work.  
Please Satisfy Yourself.  
Thanks - Dr.Nirmal  
Based on our previous successful R&D Projects using JikesRVM we are always probing  
Advanced Image Processing Using JVM Environments.

**[ Figure I – Our Simple Algorithm I – Monitoring Image Processing +Informatics+ Compiler DNA Techniques using JikesRVM/ImageJ/ImageJ–Helmholtz Plug–in ]**

### [IV] Important References (((via))) Vixra.org/Multi-disciplinary R&D Approach :

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

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

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

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

### [V] Acknowledgment/s :

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

### [VI] Conclusion/s + Future Perspectives :

A Simple Image Processing + Informatics Framework is demonstrated Using ImageJ/JVM/JikesRVM meant for rapid prototyping.

## **[VII] Image Processing References Used in our R&D :**

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

[b] [http://www.vixra.org/author/d\\_n\\_t\\_kumar](http://www.vixra.org/author/d_n_t_kumar) – Look for Formalizing of Images Using HOL/XML/Scala/Java/JVM.

**[ THE END ]**