

[JML+JI Prolog+ImageJ+JikesRVM–Research Virtual Machine+Helmholtz ImageJ Plug-in+Minsky Machines]
as a Medical Image Processing or Electron Microscopy Image Processing Software R&D Platform – An
Understanding of Java Modeling Language[JML]/OpenJML & its Promising Applications.

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[I] Inspiration + Introduction :

“The Java Modeling Language (JML) is a behavioral interface specification language that can be used to specify the behavior of [Java](#) modules. It combines the design by contract approach of [Eiffel](#) and the model-based specification approach of the [Larch](#) family of interface specification languages, with some elements of the [refinement calculus](#).

The draft paper [Design by Contract with JML](#) (by Gary T. Leavens and Yoonsik Cheon) explains the most basic use of JML as a design by contract (DBC) language for Java.”

[Source - <http://www.eecs.ucf.edu/~leavens/JML/index.shtml>]

[II] Informatics Framework for R&D :

Step 1 → input/s→ [JML+JI Prolog+ImageJ/or related ImageJ plug-ins

+JikesRVM–Research Virtual Machine

+Helmholtz ImageJ Plug-in

+Minsky Machines] → Probe → [Medical Images/cryo-EM Images/EM Images etc...]

Step 2 → Process the Images as per JML based Algorithms→ [Observe the Informatics associated with the Images]

Step 3 → Perform Image Processing Analysis for Further R&D.

Step 4→ Examine the Output/s and Store the Results in a Data Base → for IoT/HPC Heterogeneous Environment/s.

Step 5 → Stop the Image Processing Process or continue until all the specifications are met as per the ALGORITHM.

Step 6 → End the Process if Satisfied.

[Description of a Simple Algorithm to Process Medical Images or Electron Microscopy Images]

[Helmholtz Equation is very much useful in Image Processing – Hence exploring is very much interesting]

[Approximate Informatics Algorithm Only – Actual Implementation Will Certainly Vary]

[Testing in Progress With Some Promising Results]

[Please Check & Satisfy Yourselves – Thanks – Dr.Nirmal]

[III] Information on Software Used :

[a] <http://multijava.sourceforge.net/>

[b] <https://www.jikesrvm.org>

[c] <http://www.eecs.ucf.edu/~leavens/JML//jmldbc.pdf>

[d] <http://www.openjml.org/> && <http://www.openjml.org/downloads/> - Important Links.

[e] CRYO-EM IMAGE PROCESSING USING HELMHOLTZ EQUATION BASED ON IMAGEJ/JIKESRVM – A SIMPLE SUGGESTION ON THE USAGE OF HELMHOLTZ EQUATION. - [<http://www.vixra.org/pdf/1803.0124v1.pdf>]

[IV] Acknowledgment/s :

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

[THE END]