

[ Image]/Fiji/Java/JikesRVM–Research Virtual Machine/HoloJ/Jython/Python/Z3Py–Theorem Prover/QRNG Device/qrng–pylib/Machine Learning] as Holography based Image Processing & Informatics Platform in the Context of Medical Image Processing/cryo–EM Image Processing R&D. An Interesting Short Communication & Simple Technical Point of View by Prototyping Some Image Processing Algorithms.

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#### [I] Inspiration & Introduction :

[1] Understanding JikesRVM in the Context of Cryo–EM/TEM/SEM Imaging Algorithms and Applications – A General Informatics Introduction from a Software Architecture View Point – D.N.T. Kumar, Gagik Shmavonyan – DOI:10.5958/0975–8089.2016.00001.4

[2] An Insight into Cryo–EM Imaging Process Architecture Using GENTLE Compiler Construction System with an Informatics Design Paradigm.Nirmal Tej Kumar – DOI:10.5958/0975–8089.2016.00008.7

[3] A Technical Note on Hilbert Spaces as Mathematical Tools to Probe and Process Cryo–EM Images – An Architectural and Computational Point of View Using Higher Order Logic (HOL)/Scala/Java/JVM Software Environment,N.T. Kumar– DOI:10.5958/0975–8089.2016.00016.6

[4] A Simple Introduction and Short Communication on Higher Order Logic (HOL)–JVM/Jikes RVM–Based Deep Learning Algorithms and Mechanisms to Probe the Frontiers of Cryo–EM Image Processing: Tasks and Big Data–Related Applications.*D.N.T. Kumar* – DOI:[10.5958/0975–8089.2018.00021.0](https://doi.org/10.5958/0975-8089.2018.00021.0)

[5] <https://www.emdataresource.org/emsoftware.html>

[6] [https://en.wikibooks.org/wiki/Software\\_Tools\\_For\\_Molecular\\_Microscopy](https://en.wikibooks.org/wiki/Software_Tools_For_Molecular_Microscopy)

[7] <https://en.wikipedia.org/wiki/ImageJ>

[8] <https://www.idquantique.com> > *Random Number Generation* > *Products*

Could be Useful – Additional Information on Mathematics & Software Used (((via))) Vixra.org :

[a] <http://vixra.org/author/nirmal-tej-kumar> – Z3PythonAPI *Theorem Prover/ImageJ/JikesRVM/qrng* Notes.

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

[c] [http://vixra.org/author/n\\_t-kumar](http://vixra.org/author/n_t-kumar)

[d] [http://vixra.org/author/d\\_n\\_t-kumar](http://vixra.org/author/d_n_t-kumar)

[e] <https://www.semanticscholar.org/author/Nirmal-Tej-Kumar/12354503/suggest>

\*\*\* <https://qz.com> > *the-future-of-computing-is-holograms*

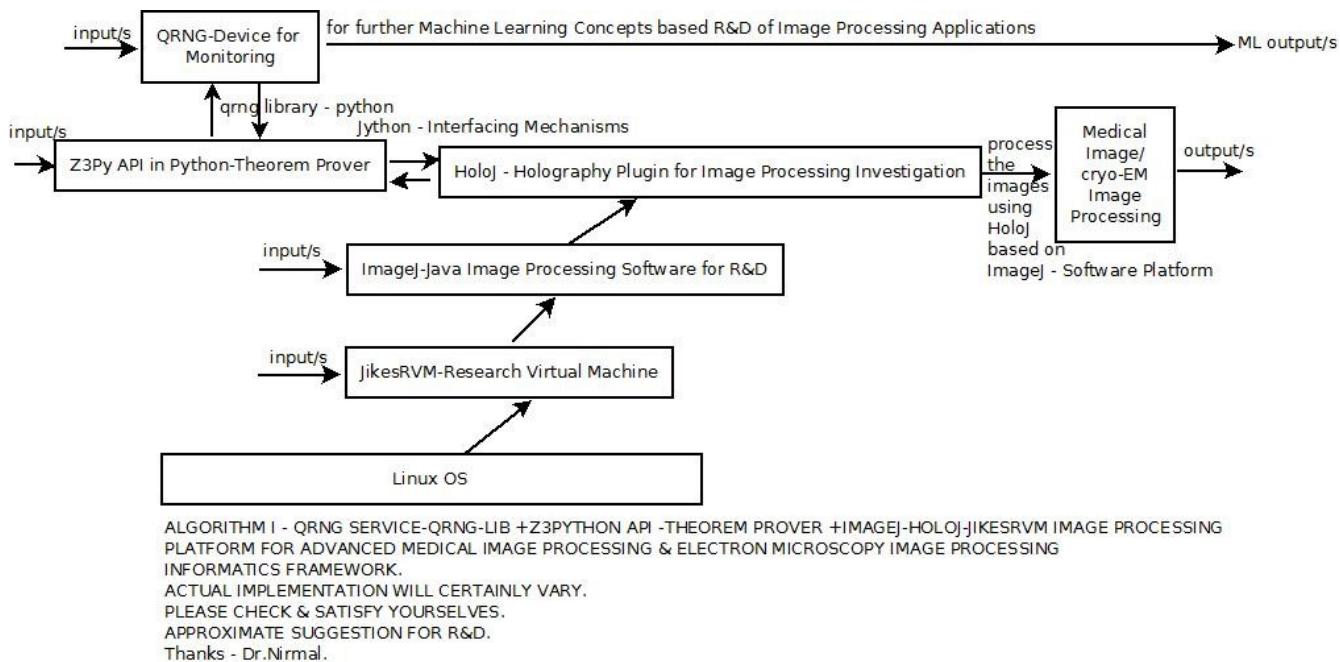
\*\*\* <https://www.microsoft.com> > en-us > *hololens*

<https://blog.ndcconferences.com> > *holographic-computing-a-quick-overview*

<https://www.cnbc.com> > 2017/12/13 > *holographic-computing-ipads-and*

<https://www.thepicky.com> > internet > *what-is-holographic-computing*

**[III] ImageJ/JikesRVM-Research Virtual Machine/Z3PyAPI/Jython Interfacing Mechanisms/QRNG Device System based Image Processing HoloJ R&D Machine Learning Framework :**



**[ Figure I- Algorithm I – ImageJ–HoloJ–QRNG–Z3Python API–JikesRVM–Research Virtual Machine Platform ]**

**HoloJ: Holographic analysis with ImageJ – Cnr-Imm** - [https://www.bo.imm.cnr.it > users > ortolani > holoj](https://www.bo.imm.cnr.it/users/ortolani/holoj)  
<http://imagej.1557.x6.nabble.com/HoloJ-New-Plugin-for-Holographic-Reconstruction-td3698928.html>  
[https://imagej.nih.gov > plugins](https://imagej.nih.gov/plugins)

**[III] Our Interesting Conclusion/s With Future Perspectives :**

A simple but useful presentation is presented on cryo-EM Image Processing using the above mentioned Mathematical and software concepts.To the best of our knowledge,this is one of the pioneering Multi-disciplinary R&D attempts to probe advanced image processing concepts based on [Java-JikesRVM-Python-Jython-Holography-qrng System].

**[IV] Acknowledgment/s :**

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 Non-Profit/Non Commercial R&D only.

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