

# **Probing Java Based [Henon Maps+ImageJ+JikesRVM+GC Spy] in the Context of Medical Images Secure Transmission Involving IoT & High Performance Computing Environments – A Simple Suggestion For Rapid Prototyping of Medical Imaging Platforms.**

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## **[I] Introduction & Inspiration :**

“ The Hénon map is a discrete-time dynamical system. It is one of the most studied examples of dynamical systems that exhibit chaotic behavior. “

[ Source : Wikipedia ]

## **Formalizing Image Processing in Higher Order Logic(hol) by Understanding and Using XML-Hol-Scala-JVM Software Framework Towards Processing of Cryo-Em/tem/sem Images Based on Levy Processes a Novel Suggestion.**

[Author : D.N.T.Kumar / Category: Digital Signal Processing / <http://vixra.org/abs/1709.0412> ]

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<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.457.2628&rep=rep1&type=pdf>

<https://brain.cc.kogakuin.ac.jp/~kanamaru/Chaos/e/Henon/>

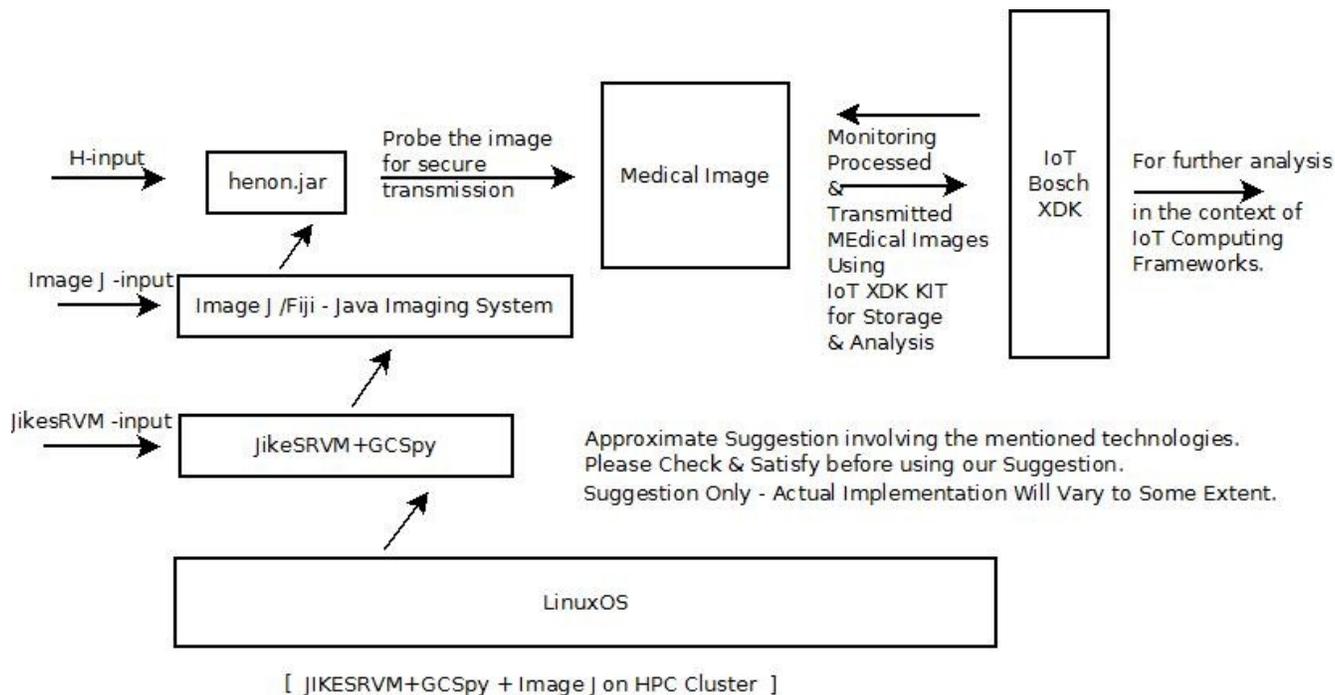
<https://brain.cc.kogakuin.ac.jp/~kanamaru/Chaos/e/pendu.html>

<https://brain.cc.kogakuin.ac.jp/~kanamaru/Chaos/e/henon.html>

<http://ijarcet.org/wp-content/uploads/IJARCET-VOL-5-ISSUE-4-924-928.pdf>

<https://imagej.nih.gov/ij/plugins/fgm/index.html> – Fractal Growth Models.

**[II] Informatics & Implementation :**



**Figure I – Our Approximate Informatics Framework .  
[ \*\*Testing in progress at the time of submission\*\* ]**

**[\*\* This could also be implemented without Jikes RVM by using another JVM also. We are not endorsing any commercial product/s used in any way. There could be other alternatives as well.\*\*]**

**[III] Additional Information on Mathematics & Software Used/Useful :**

<http://isrc.ccs.asia.edu.tw/www/myjournal/P317.pdf>

[http://paper.ijcsns.org/07\\_book/201610/20161017.pdf](http://paper.ijcsns.org/07_book/201610/20161017.pdf)

<https://www.worldscientific.com/doi/10.1142/S0218127402005121#>

<https://www.cs.kent.ac.uk/projects/gc/gcspy/>

<https://www.jikesrvm.org/>

<https://imagej.nih.gov/ij/>

<https://fiji.sc/>

<https://xdk.bosch-connectivity.com/>

<https://github.com/dcm4che/dcm4che> – DICOM in Java.

[https://download.java.net/media/jai/builds/release/1\\_1\\_3/README.html](https://download.java.net/media/jai/builds/release/1_1_3/README.html)

<https://www.oracle.com/technetwork/java/iio-141084.html>

<https://www.oxygenxml.com/doc/versions/18/ug-author/topics/author-image-rendering-jai.html>

<https://www.science.gov/topicpages/h/henon+chaotic+map>

<https://pdfs.semanticscholar.org/cd04/3182e481b86b95b1449f425a578f28ed89fb.pdf>

#### **[IV] Conclusion/s With Future Perspectives :**

HPC Hardware/Software(C/C++/Java) + RVM Related Issues +Bosch XDK IOT KIT/Platform could give better possibilities in the Medical Imaging Domains in multiple ways.To the best of our knowledge, this is one of the pioneering papers based on our previous successes in the “Challenging” world of Image Processing domains like cryo-EM Image Processing & Medical Image Processing Techniques.

#### **Acknowledgment/s :**

Special Thanks to all who made this happen in my LIFE.Non-Profit Academic R&D.  
Written & Presented to inspire others working in this domain.

**THE END.**