Technical Notes On ImageJ/Fiji/ActogramJ/JikeRVM Based Actigraphy Informatics Platform – A Simple Suggestion to Perform Actigraphy Analysis Using JikesRVM as the Java Virtual Machine(JVM).

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Abstract :

According to published literature :

"Actigraphy is a non-invasive method of monitoring human rest/activity cycles. A small actigraph unit, also called an actimetry sensor is worn for a week or more to measure gross motor activity. The unit is usually, in a wrist-watch-like package, worn on the wrist. The movements the actigraph unit undergoes are continually recorded and some units also measure light exposure. The data can be later read to a computer and analysed offline; in some brands of sensors the data are transmitted and analysed in real time."[1-9].We are interested in focusing on the above mentioned research topic as per the title of this communication.Interested in suggesting an informatics and computational framework in the context of Actigraphy using ImageJ/Actigraphy Plugin by using JikesRVM as the Java Virtual Machine.

Keywords: Image J/Actogram J/JikesRVM/Actigraphy/Java Virtual Machine

Informatics Framework & Implementation :
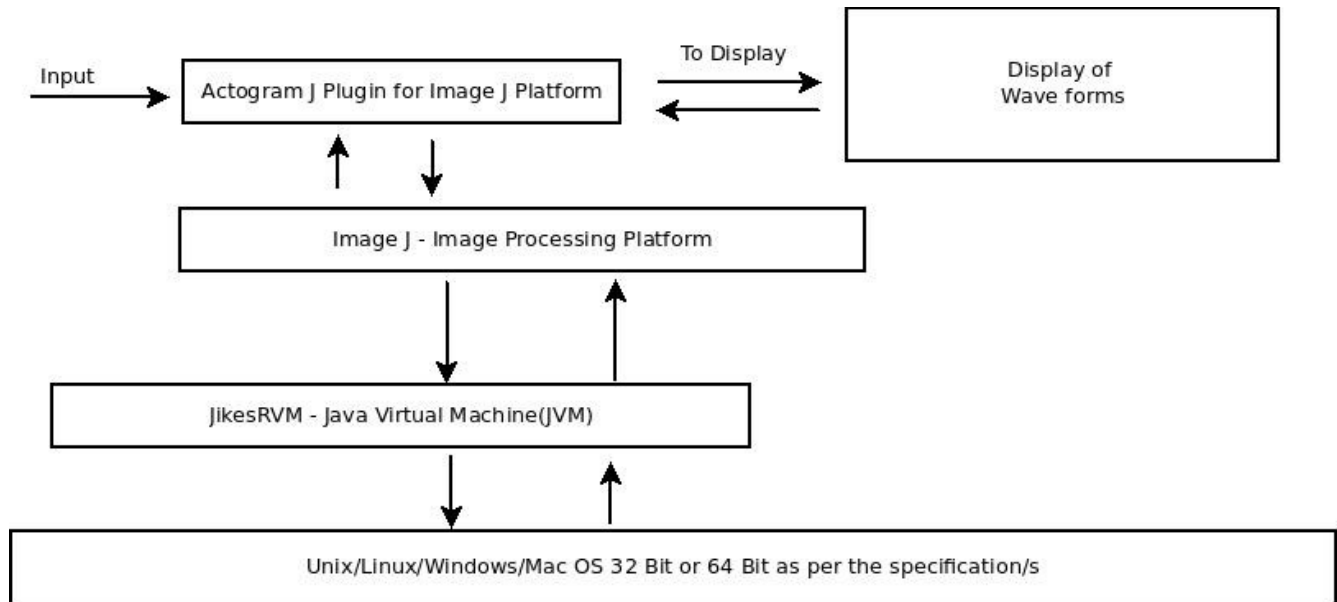
Figure I : Total Overview of the Idea – Simple Informatics Implementation Using JikesRVM as the Java Virtual Machine.

For detailed information please refer to the Refs[1-9] and the Figure I presented above.

Since this is a short communication we do not intend to discuss all the details on an in-depth basis,this communication is just to inform readers about the latest trends & to encourage the readers to probe the interesting aspects of actography further using Java based technologies in the context of IoT.

Inspired by :

Schmid B, Helfrich-Förster C, Yoshii T: A new ImageJ plugin "ActogramJ" for chronobiological analyses. J Biol Rhythms 2011, 26:464-467.

Source : http://journals.sagepub.com/doi/abs/10.1177/0748730411414264

Source : http://www.neurogenetics.biozentrum.uni-wuerzburg.de/startseite/

Acknowledgement/s :

References :

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[2] Jean-Louis, Girardin, et al. "Sleep estimation from wrist movement quantified by different actigraphic modalities." Journal of neuroscience methods 105.2 (2001): 185-191.

[3] https://imagej.nih.gov/ij/

[4] https://imagej.net/Writing_plugins

[5] https://www.researchgate.net/publication/51646050_A_New_ImageJ_Plug-in_ActogramJ_for_Chronobiological_Analyses

[6] http://actogramj.neurofly.de/

[7] https://en.wikipedia.org/wiki/Actigraphy

[8] http://www.jikesrvm.org/

[9] http://www.vixra.org/pdf/1709.0146v1.pdf