# Medical Images Registration Concepts in the Context of Following Software involving [SimpleElastix+IMAGEAI] for IoT/HPC Heterogeneous Environment/s – An Interesting Investigation Using AI+Python.

[Exploring Simple Elastix : Medical Image Registration Library + ImageAI -Python based AI Library]

Nirmal Tej Kumar

Independent Consultant   Informatics/Imaging/Photonics/Nanotechnology/HPC R&D.
R&D Collaborator   USA/UK/Israel/South Korea/BRICS Group of Nations.
Current Member   ante Inst,UTD,Dallas,TX,USA.
email id   hmfg2014@gmail.com

[I] R&D Informatics Framework in the Context of Medical Image Processing Using AI+Python :
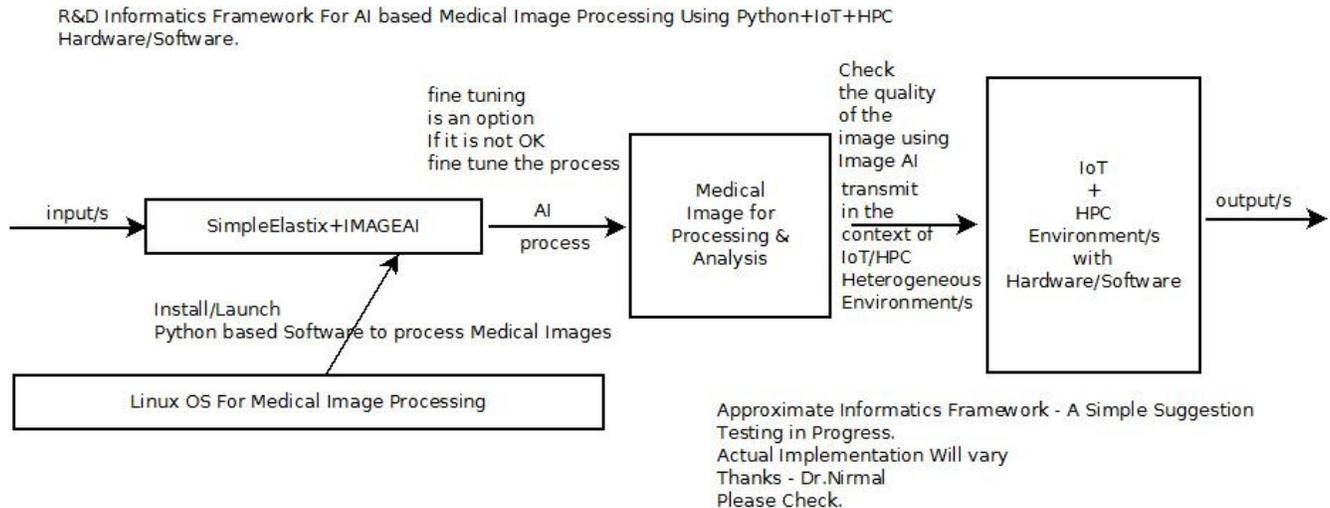
[Figure I – Simple Informatics Framework – Python based Image Processing+AI Related Tasks]

" **SimpleElastix** is an extension of SimpleITK that includes the popular elastix C++ library. Elastix is a modular collection of high-performance medical image registration algorithms, for which SimpleElastix automatically generates bindings for Python, Java, R, Ruby, Octave, Lua, Tcl and C#. This makes state-of-the-art registration really easy to do in your favorite programming environment. "

"ImageAI -State-of-the-art Recognition and Detection AI with few lines of code."

https://www.radiologybusiness.com/topics/artificial-intelligence/machine-learning-could-enable-medical-image-registration-during

news.mit.edu › faster-analysis-of-medical-images-0618

https://www.aaai.org › index.php › AAAI › AAAI17 › paper › download

https://www.rsna.org › news › April › roadmap-for-AI-in-medical-imaging

https://www.ncbi.nlm.nih.gov › pmc › articles › PMC6268174

https://www.aitrends.com/healthcare/machine-learning-in-medical-imaging-and-analysis/
For more information - Please go to deepsense.ai.

[II] Related R&D Information on Mathematics & Software Used :

[a] https://github.com/SuperElastix/SimpleElastix

[b] http://simpleelastix.github.io/

[c] https://towardsdatascience.com/the-story-and-future-of-imageai-one-year-anniversary-e63c80f527c8

[d] http://vixra.org/author/nirmal_tej_kumar

[e] http://vixra.org/author/nirmal

[f] *vixra.org › author › n_t_kumar*

[g] *vixra.org › author › d_n_t_kumar*

[h] *vixra.org › author › dnt_kumar*

[i] **Formalizing Image Processing in Higher Order Logic(hol) by ... - viXra**
https://www.vixra.org › abs *viXra.org* > Digital Signal Processing > *viXra*:1709.0412.
 Authors: *D.N.T.Kumar*.

[j] http://vixra.org/abs/1709.0389

[THE END]