

Revisiting Mathematical Formalism involving [Lp Spaces] in the Context of Microwave Imaging for [Medical applications/CryoElectronMicroscopy] – Using [Higher Order Logic(HOL)/Scala/JVM/JikesRVM/Scalalab/LMS-Scala Informatics] to Implement [IoT/HPC] Computing Framework/s.

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[I] Introduction & Inspiration :

<http://www.aem.dibe.unige.it/drupal/content/brain-stroke-microwave-imaging-means-newton-conjugate-gradient-method-lp-banach-spaces>

<https://www.hindawi.com/journals/ijap/2016/9304371/>

https://www.researchgate.net/publication/258655852_A_Novel_Microwave_Imaging_Approach_Based_on_Regularization_in_Lp_Banach_Spaces

<https://www.mdpi.com/2079-9268/8/4/43/pdf>
<https://link.springer.com/article/10.1007/s11042-017-4867-7>
<https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1002/2014RS005542>

Microwave Imaging Methods and Applications - By Matteo Pastorino, Andrea Randazzo .

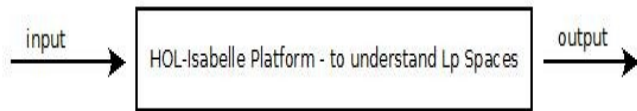
<http://scienze-como.uninsubria.it/masi3a/CMIP2018/slides/Estatico.pdf>
<http://www.ursi.org/proceedings/procAT18/papers/PID5204031.pdf>
<https://www2.eecs.berkeley.edu/Pubs/TechRpts/2017/EECS-2017-191.pdf>
<https://www.osapublishing.org/optica/abstract.cfm?uri=optica-5-12-1529>

<http://vixra.org/abs/1709.0412> – Formalizing Image Processing.

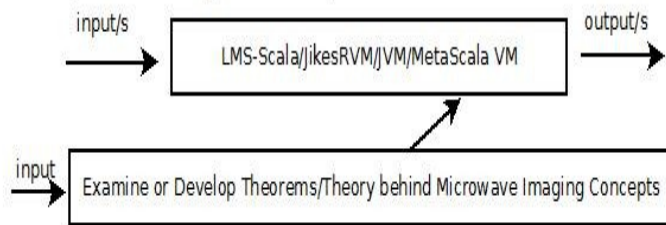
DOI: 10.5958/0975-8089.2016.00001.4 - Understanding JikesRVM in the Context of Cryo-EM/TEM/SEM Imaging Algorithms and Applications – A General Informatics Introduction from a Software Architecture View Point.

[II] Informatics Framework & Implementation :

STEP 1 : Explore Lp Spaces First & Understand them.



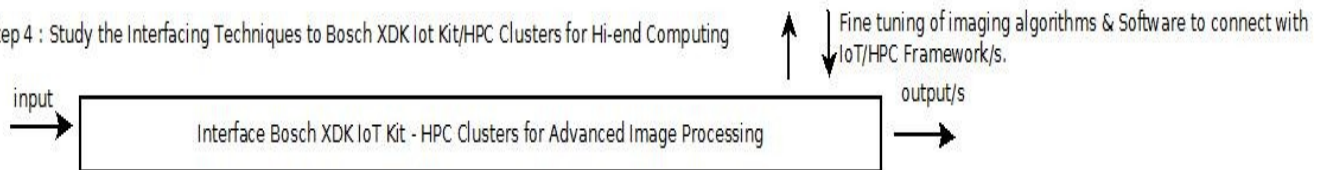
STEP 2 : Explore LMS-Scala-Spiral Framework/s.



STEP 3 : Apply to Medical Imaging/cryoEM Imaging Applications.



Step 4 : Study the Interfacing Techniques to Bosch XDK IoT Kit/HPC Clusters for Hi-end Computing



[Approximate Suggestion involving Lp Spaces/Microwave Imaging Concepts for better Hi-end Image Processing & Computing applications]

Figure I – Our Total Overview.

Information on Mathematics & Software Used/Useful :

<http://scala-lms.github.io/>

<https://acl.inf.ethz.ch/research/Spirals/>

<https://acl.inf.ethz.ch/publications/>

<https://dl.acm.org/citation.cfm?doid=2517208.2517228>

<https://isabelle.in.tum.de/>

<https://www.isa-afp.org/entries/Lp.html>

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

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

<https://github.com/sterglee/scalalab> && <https://github.com/lihaoyi/Metascala>

<https://scalameta.org/> && <https://www.scala-lang.org/>

[III] Acknowledgment/s :

Special thanks to all.Non-Profit Academic R&D.

Lot of FINE TUNING is required – Please Check & Satisfy Yourself.

Thank You.