Image Recognition in Ruby TensorFlow w.r.t Advanced Electron Microscopy [EM] /cryo-EM Images — A Simple Idea on Using C/Ruby/mruby/QRNG/ML involving intel's Movidius/Smart Devices + IoT + HPC Heterogeneous Systems as a Robust Image Processing Platform for Rapid Prototyping of Imaging Algorithms.

 $Nirmal-Informatics\ R\&D-USA/UK/Germany/Japan/Israel/BRICS\ Group\ of\ Nations.$ $Current\ Member-ante\ Inst\ UTD\ Dallas\ TX\ USA.$ $Contact_info-\underline{hmfg2014@gmail.com}$

[I] Main Idea + Inspiration + Introduction :

Exploring Inception-v3 in tensorflow.rb \rightarrow by Arafat:

[Source - https://medium.com/@Arafat./image-recognition-in-ruby-tensorflow-df5d5c05389b#.ty1vygtrg].

https://medium.com/@matriXanger/image-recognition-with-owl-a5a6d0caef33

[II] R&D Informatics Framework to Probe cryo-EM Images:

Please derive your own Informatics TEST BED to to probe the images of interest using:

 $\frac{https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/OCaml-C-llvm-Inceptionv3-Nir-21.pdf}{}$

Simply replace OCaml with Ruby/TensorFlow.rb + fine tune the image processing algorithms.

Thanks - Dr.Nirmal.

[III] Important + Useful References:

- 1. [Introductory blog post](https://medium.com/@Arafat./introducing-tensorflow-ruby-apie77a477ff16e#.mhvj9ojlj)
- 2. [Developers blog post](https://medium.com/@Arafat./ruby-tensorflow-for-developers-2ec56b8668c5#.97tng1qqi)
- 3. [Image Recognition Tutorial](https://medium.com/@Arafat./image-recognition-in-ruby-tensorflow-df5d5c05389b#.ty1vygtrg)
- 4. https://github.com/tejdnk-2019-ShortNotes
- 5.TensorFlow](https://github.com/tensorflow/tensorflow
- 6. DOI: 10.5958/0975-8089.2016.00001.4 cryo-EM Image Processing Using Java/JikesRVM.

[IV] Acknowledgment/s:

Sincere Thanks to all WHO made this happen in my LIFE.

Non-Profit R&D.

Inspire Others Always.

[V] Conclusion/s + Future Perspectives :

Tensor Flow and Ruby – What a combination !!!.

[THE END]