Exploring & Testing a Flexible Framework for Neural Network for Ruby by Using : Ruby-Helix Software + Ruby wrapper for the GR Framework + Fourier Analysis of Super Mutant Viruses + QRNG/ mruby w.r.t COVID-19 Bio-informatics R&D.

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[I] Main Reason Inspiration & Introduction towards COVID-19 & Related Bio-informatics :

https://thecodest.co/blog/why-do-we-expect-a-high-demand-for-ruby-software-products/ -> KAMIL FERENS, 2020-06-23
Why do we expect a high demand for Ruby software products in times of crisis?

https://vixra.org/abs/1909.0364 -> Our R&D inspiration - *We have already presented a number of examples using Ruby - Please Read.*

https://www.pnas.org/content/110/45/E4175/tab-article-info. https://pubmed.ncbi.nlm.nih.gov/24350339/ - Reply ;

https://www.pnas.org/content/110/45/E4172 etc.........

Ruby-Helix: An implementation of helical image processing based on object-oriented scripting language February 2007 · Journal of Structural Biology 157(1):95-105 DOI:10.1016/j.jsb.2006.07.015 -> *Ruby-Helix is an excellent R&D Software to probe interesting ideas.*

https://dev.to/daviducolo/machinelearning-with-ruby-3m75 - Machine Learning with Ruby language.

[II] Bio-informatics Ruby based Deep Learning R&D Framework for Fourier Analysis of Viruses w.r.t COVID-19 :

https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/Ruby-BioRuby-Nir-21.pdf ** -> Please FINE TUNE our Algorithms.It is very EASY with Ruby/mruby/Bio-ruby -> to probe the frontiers of bio-informatics.

As Matz said -" Ruby is meant for HUMANS not Machines ". -> This is my inspiration always.

Ruby is one of the BEST SOFTWARE tools for RAPID PROTOTYPING.

I am working on these algorithms.[Fine tuning for my R&D]

Keep Hacking ....COVID-19 threat is far from over all over the world.

With Thanks - Dr.Nirmal.

[III] Important & Useful References :

[a] https://en.wikipedia.org/wiki/Fourier_analysis
[b] https://structure.m.u-tokyo.ac.jp/English/software/Ruby-Helix-Page/ruby-helix.html

[c] https://www.ruby-lang.org/en/ & [d] https://github.com/tejdnk-2019-ShortNotes -> *Plenty of Examples for your use - Thanks - Dr.Nirmal.*
[e] https://www.honeybadger.io/blog/ruby-neural-networks/

[f] http://dx.doi.org/10.5958/0975-8089.2019.00006.X - Haskell/cryo-EM Image
[g] https://www.science.org/content/blog-post/hiv-structure-breakthrough-complete-rubbish

[h] https://vixra.org/abs/1906.0062 && [i] https://vixra.org/author/nirmal_tej_kumar -> *Plenty of Examples for You - With Thanks - Dr.Nirmal.*

[j] https://github.com/red-data-tools/GR.rb -> interesting ruby software tools. && [k] https://structure.m.u-tokyo.ac.jp/English/publications/publications.html

[l] https://medium.com/swlh/metaprogramming-in-ruby-1b69b1b54202 && [m] https://github.com/cremno/mruby-libqrng

[n] https://qrng.physik.hu-berlin.de/ && [o] http://bioruby.org/ &&

[p] https://journals.iucr.org/m/issues/2019/06/00/eh5004/

[IV] Acknowledgment/s:

Non-Profit R&D - Sincere Thanks to all WHO all made this happen in my LIFE - Inspire others always.

[V] Conclusion/s + Future Perspectives w.r.t COVID-19 R&D :

One of the pioneering R&D Efforts in this highly challenging domains of S&T w.r.t COVID-19/Corona Viruses.We need to do more research.

How the Virus Will Mutate in the Future ? - It is far from over.So,let us Probe Corona Virus Mechanisms of spreading.

"Every time the coronavirus passes from person to person it picks up tiny changes to its genetic code, but scientists are starting to notice patterns in how the virus is mutating."

[Source -> **https://www.bbc.com/future/article/20210119-covid-19-variants-how-the-virus-will-mutate-in-the-future ?]**

[https://vixra.org/pdf/2006.0119v1.pdf - Just Think about our Suggestion & Idea. -> COVID-19/CoronaVirus]

[THE END]