

# Understanding & Exploring Diffusion Wavelets + Minsky Machines + ScalaNLP w.r.t Using Eclipse Scala-IDE in the Context of Designing COVID-19 Bio-informatics Novel R&D Algorithms → A Simple Technical Communication.

Nirmal Tej Kumar

Independent Consultant – Informatics/Imaging//Photonics/Nanotechnology/HPC R&D.

R&D Collaborator – USA/UK/Israel/BRICS Group of Nations.

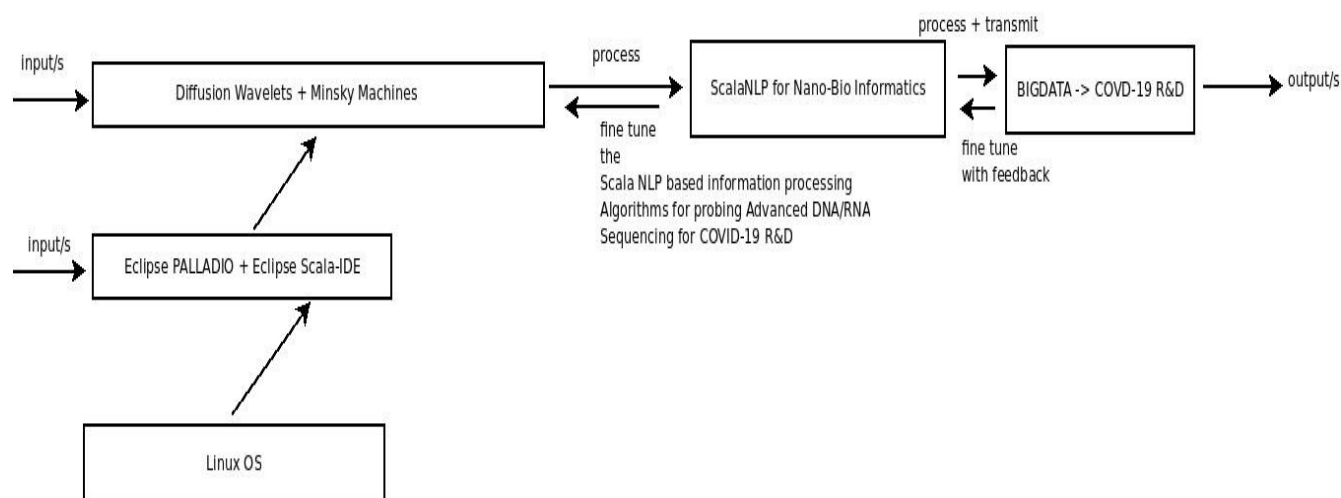
Current Member – ante Inst UTD Dallas TX USA.

Contact\_info – [hmfg2014@gmail.com](mailto:hmfg2014@gmail.com)

## [I] Main Idea + Inspiration :

A SIMPLE SUGGESTION ON DESIGNING + DEVELOPING + TESTING + IMPLEMENTING BIO-INFORMATICS ALGORITHMS USING SCALA & ITS RELATED MATHEMATICAL TOOLS.  
ONE OF THE PIONEERING R&D EFFORTS W.R.T COVID-19 INFORMATICS FRAMEWORK.

[ ACTUAL IMPLEMENTATION WILL VARY PLEASE UNDERSTAND MINSKY MACHINES & WAVELETS BEFORE TESTING OUR IDEA/S ]



Algorithm I - Bioinformatics R&D Framework Using Scala w.r.t COVID-19

Testing in progress.

please read all the scientific literature presented or referred to,

Thanks for understanding - Dr.Nirmal.

Approximate Suggestion Only.

Please Satisfy Yourselves before testing or implementing our framework.

## [ Figure I – Scala based Bio-informatics Framework → DNA/RNA Sequencing ]

\*\*\* Please see our references could be very useful in designing Novel Algorithms.

“Diffusion wavelets have been used in many areas including Natural Language Processing (NLP), Information Retrieval (IR), Dimensionality Reduction, Reinforcement Learning, Transfer Learning, and Graphics, etc. “ Ref [b].

\*\*\* Additional info → <https://www.palladio-simulator.com/tools/> && <http://scala-ide.org/>

## **[II] Important Reference/s :**

- [a] <https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io>
- [b] Applications of Diffusion Wavelets in Learning - Chang Wang's Home Page → <https://sites.google.com/site/changwangnk/home/dwt-html>
- [c] <https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/Scala-Bioinformatics-Nirmal-2021.pdf>
- [d] <http://www.scalanlp.org/> → Scala NLP Tools → Very much useful.
- [e] <https://vixra.org/pdf/1901.0445v1.pdf> – Minsky Machines and Medicine.
- [f] <https://vixra.org/pdf/1911.0218v1.pdf> – Minsky Machines and Bio-informatics.

## **[III] Acknowledgment/s :**

Sincere Thanks to all WHO made this happen in my LIFE. Non-Profit R&D. Inspiring Others is GOOD.

**[ THE END ]**