Python + Wavelets + Jacobian Matrices w.r.t ANN Using Smart Devices + IoT + HPC Heterogeneous Systems -> A Short Technical R&D Communication

Nirmal - Informatics R&D - USA/UK/Israel/BRICS Group of Nations.
Current Member - ante Inst UTD Dallas TX USA.
Contact_info - hmfg2014@gmail.com

[I] Main Idea + Inspiration + Introduction :

Wavelets & Jacobian Matrix Computation for ANN - Artificial Neural Networks -> To Probe Advanced Information Processing Algorithms.

[II] R&D Informatics Framework Using Python & its Related Mathematical Tools :

Based on our Reference on github : https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/Img-NN-Jacob-Nir-21.pdf our readers could easily derive their own Informatics Framework.Thanks for understanding - Dr.Nirmal.

[III] Important & Useful References :

[a] https://stackoverflow.com/questions/26132620/jacobian-matrix-computation-for-artificial-neural-networks

[b] https://web.stanford.edu/class/cs224n/readings/gradient-notes.pdf

[c] https://tidelift.com/subscription/pkg/pypi-pywavelets?utm_source=pypi-pywavelets&utm_medium=github_sponsor_button

[d] https://www.youtube.com/channel/UCHf1pH6ghdApN1aC3jLuL5A - Dr.Klopper -> Excellent Reading Materials.

[e] https://machinelearningmastery.com/a-gentle-introduction-to-the-jacobian/

[f] https://www.sciencedirect.com/topics/earth-and-planetary-sciences/artificial-neural-network

[g] https://www.kdnuggets.com/2017/03/medical-image-analysis-deep-learning.html

[h] https://en.wikipedia.org/wiki/Artificial_neural_network -> ANN or NN

[i] https://github.com/tejdnk-2019-ShortNotes -> Plenty of examples that could be useful.

[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 :

An Excellent introduction to Python based ANN w.r.t Jacobian Matrices + Wavelets -> to Probe Space + Medicine + Telecoms + HPC R&D. Rigorous Testing in Progress @ the TIME of Submission.

[THE END]