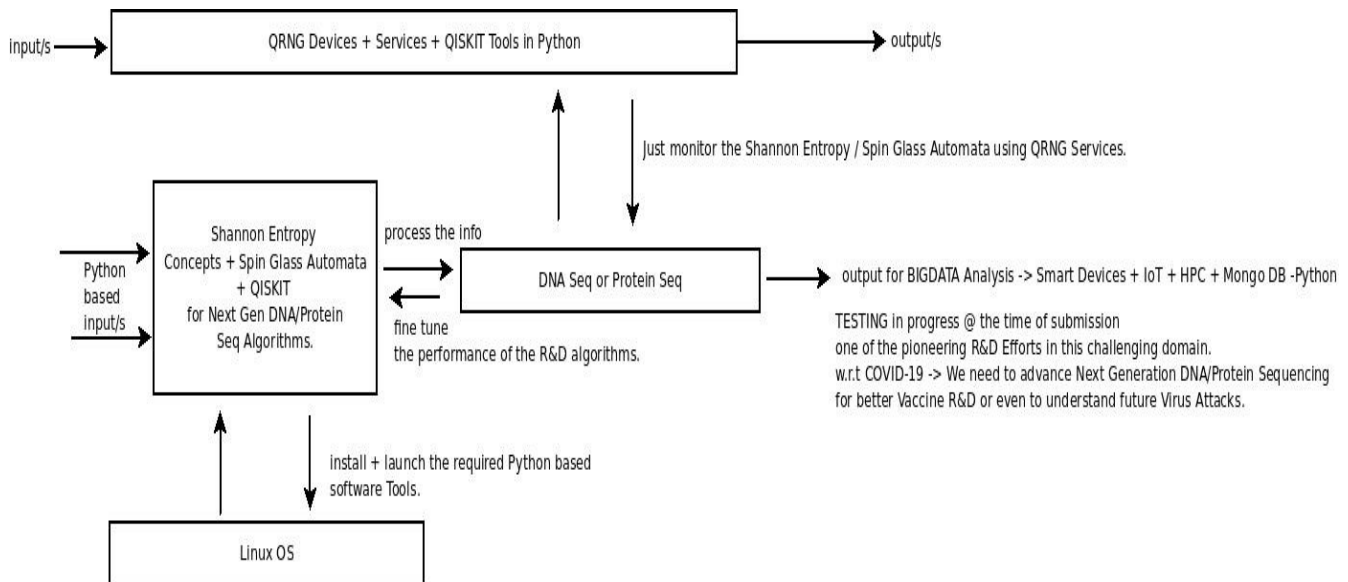**Shannon Entropy /Spin Glass Automata for Computing for DNA Sequencing R&D Algorithms Using Python + Qiskit → A Simple Suggestion.**

Nirmal – ante Inst UTD Dallas TX USA.
Contact_info – hmfg2014@gmail.com

[I] Main Idea + Implementation :


```
input/s ──→ [ QRNG Devices + Services + QISKIT Tools in Python ] ──→ output/s

                                    Just monitor the Shannon Entropy / Spin Glass Automata using QRNG Services.

Python          [ Shannon Entropy        process the info
based             Concepts + Spin Glass Automata  ──→  [ DNA Seq or Protein Seq ] ──→ output for BIGDATA Analysis -> Smart Devices + IoT + HPC + Mongo DB -Python
input/s           + QISKIT
                  for Next Gen DNA/Protein   fine tune                          TESTING in progress @ the time of submission
                  Seq Algorithms. ]        the performance of the R&D algorithms.   one of the pioneering R&D Efforts in this challenging domain.
                                                                                 w.r.t COVID-19 -> We need to advance Next Generation DNA/Protein Sequencing
                                                                                 for better Vaccine R&D or even to understand future Virus Attacks.

                          install + launch the required Python based
                          software Tools.

                  [ Linux OS ]
```

Simple Approximate Idea - Please Check + Satisfy Yourselves.
Actual Implementation might vary.
Thanks - Dr.Nirmal.

ALGORITHM I - NEXT GENERATION BIO-INFORMATICS USING ABOVE MENTIONED R&D TOOLS.
W.R.T COVID-19 TESTING MECHANISMS USING DNA SEQUENCING etc.....

[Figure I – Simple Algorithm I – To TEST Shannon Entropy/Spin Glass Automata Concepts]

** https://onestopdataanalysis.com/shannon-entropy/ - Very useful & Important Notes.
http://article.sapub.org/10.5923.j.ajis.20110101.01.html - Spin Glass Automata.
https://qiskit.org/ → Highly useful information.

[II] Important References :

[a] https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io

[III] Acknowledgment/s : Non-profit R&D.

[THE END]