Understanding + Testing Liquid State Machines [LSM] & Liquid State Genetic Programming [LSGP] as Information Processing Tools in the Context of Python/Smart Devices/IoT/HPC R&D Heterogeneous Environments – A Short Communication.

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[I] Abstract:

Our Multi-disciplinary approach is to build a system which allows us to run a Liquid State Machine [LSM] on the Next Generation Informatics Platforms.

e.g. probing Space + Medicine based R&D Domains involving \rightarrow Advanced Image Processing/Computer Vision/EEG etc....

index words/keywords: please guess.

[II] Inspiration + Introduction:

- [a] https://mediatum.ub.tum.de/doc/1422447/1422447.pdf
- [b] https://igi-web.tugraz.at/PDF/189.pdf
- [c] https://www.researchgate.net/figure/Components-of-our-approach-based-on-Liquid-State-Machine-LSM-Thereare-three-main_fig6_319164280
- [d] **Adaptive and Natural Computing Algorithms: 8th International** ...books.google.co.in → books → Bartlomiej Beliczynski,Andrzej Dzielinski, Marcin Iwanowski 2007.

"FOUND INSIDE – PAGE 220 → Liquid State Genetic Programming – Mihai Oltean Department of Computer Science Faculty of Mathematics and Computer Science ... 1.Introduction Liquid State Machine (LSM) is a technique recently described in the literature [3], [5]. "

[III] Informatics Framework for Testing our R&D Algorithms Using Python +Other Software Tools:

- \rightarrow { LSM + LSGP \rightarrow Information Processing of Images \rightarrow Smart Devices + IoT+HPC Systems Using Python/OCaml/CoqTheorem Prover/q*cert/Python-based QRNG. } \rightarrow
- "Next Generation Imaging + Informatics Platforms Using Python."
- ** To know more Please see our Notes (((via))) Vixra.org

[IV] Multi-disciplinary approach based Short Notes (((via))) Vixra.org:

- [a] http://www.vixra.org/author/d_n_t_kumar
- [b] http://www.vixra.org/author/n_t_kumar
- [c] http://www.vixra.org/author/Nirmal
- [d] http://www.vixra.org/author/nirmal_tej_kumar

[V] Acknowledgment/s:

Sincere Thanks to all my Mentors+Friends+Collaborators for this NON-PROFIT R&D.

[VI] Important References on LSM-Liquid State Machines:

- [a] https://en.wikipedia.org/wiki/Liquid_state_machine
- [b] https://bitbucket.org/Hananel/liquid-state-machine
- [c] https://web.archive.org/web/20120222154641/http://ramsesii.upf.es/seminar/Maass_et_al_2002.pdf
- [d] https://en.wikipedia.org/wiki/Spiking neural network

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