

NooJ Digital Text Automation Workshop: Artificial Intelligence (AI): Data Processing Automation and Cybersecurity Technologies

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Abstract

The research project, which will be conducted from 2020 to 2024, is being carried out by a team of experts. The project is based on models, processes, methods, and technologies for NLP2023. The research topic for the project is: the field of study known as Natural Language Processing, or NLP, which is concerned with the processing of human language in digital form [1]. This project proposes communication strategies among scientists for cooperative actions in real time. Text automation is the primary focus of this subject, which involves the transition from human to digital thinking. The irrefutable statements about the formal language (i.e. synthetic and fixed, and homology classes), as proposed by Douglas R [2] and by M. Planat, are presented in Graph Coverings for Investigating Non-Local Structures in Proteins, Music, and Poems [3].

The research into the discussion is based on point 0, which converts alphabetical code with relative grammar to formal grammar. The methodology of the process is described by Bucciarelli. et al., during EUPORIA 2021 [4], [5] when quantum physicists are invited to transfer information from quantum theory of phonic musicology to phonic literature.

The actions for automatic processing, analysis, and production of scans in environments and models was made by:

- Team DM - Data surveys and statistical calculations and prediction of linguistic (phono-tonal) and manipulative mechanisms on the text under study according to the required type (literary)
- NooJ M. Silberztein Laboratory - for the development of automatic data analysis, for production of approximation graphs for DB construction [6], [7].
- Quantum computing is used for data automation, as stated by C. Mereghetti, to construct finished automata in ... [8]
- Ettore Galluccio et al. affirm in SQL Injection, Strategies Pack<t> in Experts in secure system design and cyber risk management... [9].

Keywords

Automation, Numerical groups, Quantum computing automata, Acronyms.

References

1. R. Bucciarelli, Research project 2020-2023: model -processes- methods -technologies NLP-.
2. Douglas, R. G. (1980). *C*-Algebra Extensions and K-Homology*. (AM-95). Princeton University Press. <http://www.jstor.org/stable/j.ctt1b9s045>
3. Planat, M., Aschheim, R., Amaral, M. M., Fang, F., & Irwin, K. (2021). Graph Coverings for Investigating Non-Local Structures in Proteins, Music, and Poems. *Sci*, 3(4), 39. <https://www.mdpi.com/2413-4155/3/4/39> .
4. Bucciarelli, R., Veronesi, I., Greco, M., Gagliardi, N., Tortoriello, F. S., Savarese, G., ... & Villari, P. (2021, February). Communication in Congress Webseminar Euporia 2021. In *webseminar-Euporia 2021*, Venice, Italy. <hal-04065553>.
5. Bucciarelli, R., Veronesi, I., Greco, M., Gagliardi, N., Tortoriello, F. S., Savarese, G., ... & Villari, P. (2021, February). Communication in Congress Webseminar Euporia 2021: Homero, PowerPoint Presentation. *Webseminar-Euporia 2021*, Venice, Italy. <hal-04065553>.
6. Silberztein, M. (2016). *Formalizing natural languages: The NooJ approach*. John Wiley & Sons.
7. Silberztein, M. (2018). A new linguistic engine for NooJ: Parsing context-sensitive grammars with finite-state machines. In *Formalizing Natural Languages with NooJ and Its Natural Language Processing Applications: 11th International Conference, NooJ 2017, Kenitra and Rabat, Morocco, May 18–20, 2017, Revised Selected Papers 11* (pp. 240-250). Springer International Publishing.
8. Bertoni, A., Mereghetti, C., & Palano, B. (2003). Quantum computing: 1-way quantum automata. In *Developments in Language Theory: 7th International Conference, DLT 2003 Szeged, Hungary, July 7–11, 2003 Proceedings 7* (pp. 1-20). Springer Berlin Heidelberg.
9. https://www.researchgate.net/publication/221212400_Quantum_Computing_1-Way_Quantum_Automata.
10. Galluccio, E., Caselli, E., & Lombardi, G. (2020). *SQL Injection Strategies: Practical techniques to secure old vulnerabilities against modern attacks*. Packt Publishing Ltd.