
Doctoral School of Information and Biomedical Technologies
Polish Academy of Sciences (TIB PAN)

Topic:

Natural Language Processing Algorithms for Reviewer Recommendations System

Supervisor:

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Description:

Reviews play a crucial role in the academic world. Virtually all scientific publications, grant proposals and dissertations are subject to review. The reviewer should be an expert in the area of the reviewed work. The proper selection of reviewers should ensure they prepare opinions at the highest merit level. For this reason, the problem of choosing the right reviewers is not only widespread in scientific life but is also very important from the point of view of the further fate of the assessed achievements and their authors.

The goal of the project is to develop algorithms using Natural Language Processing for the selection of reviewers:

1. doctorates, postdoctorates, professorships
2. grant applications
3. manuscripts of scientific articles submitted to scientific journals.

The project should develop algorithms that consider the previous scientific background of potential reviewers (full texts of publications and/or their abstracts), formal requirements and potential conflicts of interest.

Recommended reading:

1. Dadas, S., & Protasiewicz, J. (Eds.). (2012a). *Procedury recenzowania i doboru recenzentów. T. 1.* Ośrodek Przetwarzania Informacji - Instytut Badawczy.
2. Dadas, S., & Protasiewicz, J. (Eds.). (2012b). *Procedury recenzowania i doboru recenzentów. T. 1.* Ośrodek Przetwarzania Informacji - Instytut Badawczy.
3. Rampisela, T. V., Elisabeth, D., & Sensuse, D. I. (2020). Characteristics of Expertise Locator System in Academia: A Systematic Literature Review. *2020 International Seminar on Intelligent Technology and Its Applications (ISITIA)*, 186–193. <https://doi.org/10.1109/ISITIA49792.2020.9163671>
4. Zhang, Z., Patra, B. G., Yaseen, A., Zhu, J., Sabharwal, R., Roberts, K., Cao, T., & Wu, H. (2023). Scholarly recommendation systems: A literature survey. *Knowledge and Information Systems*. <https://doi.org/10.1007/s10115-023-01901-x>