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AI/ML BASED AUTOMATION OF R&D PROPOSALS EVALUATOR WITH EXPLAINABLE AI

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The proposed system will integrate the approaches of Natural Language Processing (NLP) and semantic search mechanisms and explainable algorithms to process suggestions and generate multi-dimensional evaluation outcomes. The framework is geared at the assessment of the principle parameters i.e. novelty, relevance, and technical feasibility, hence objective and transparent decision making. The fact that the performance is validated on a benchmark data indicates that the overall classification accuracy is 59.2%, which demonstrates that the automated screening of proposals can take place in the real-life situations.

The paper discerns the possibilities of the AI-driven systems to radically reduce the time to be devoted to the evaluation and to improve the process of review at any opportunity in consistency and transparency. The findings can be used in practice in the introduction of automated systems of R&D proposal evaluation and represent useful materials that can serve as evidence in the integration of automated systems into the process of the organizational management of the institutional research.