

# **Natural Language to SQL Queries Generation using NLP Techniques**

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**Abstract:** *Databases are progressively standard components of modern websites and applications. They are regularly utilized by those who need an in-depth understanding of their structure and impressive competence in the field. Hence, these days it has ended up exceptionally imperative to build a framework that can interpret common dialect to SQL questions. Be that as it may, because of restrictions in their design, numerous existing frameworks are restricted to specific databases. In this paper, we have shown a modern approach that employs English dialect inquiries to any database. The result demonstrates the effectiveness of this approach by retrieving the information from the database and giving the output to the user query.*

**Keywords:** Database (DB), SQL queries, English SQL translator, Human-DB interface

## **REFERENCES**

- [1]. Zafar, A., Malik, M. S. I., & Suriadi, S. (2020). "Natural language to SQL query translation: A novel approach for user interpretation. Information Systems".
- [2]. Giannotti, F., Nanni, M., Pedreschi, D., Pinelli, F., Renso, C., Rinzivillo, S., & Trasarti, R. (2011). "Unveiling the complexity of human mobility by querying and mining massive trajectory data".
- [3]. Bird, S., Klein, E., & Loper, E. (2009). Natural Language Processing with Python. O'Reilly Media, Inc
- [4]. Manning, C. D., Surdeanu, M., Bauer, J., Finkel, J., Bethard, S. J., & McClosky, D. (2014). "The Stanford CoreNLP natural language processing toolkit". In Proceedings of 52nd annual meeting of the association for computational linguistics: system demonstrations.
- [5]. Wilbur, W. J., & Sirotkin, K. (1992). "The automatic identification of stop words. Journal of information science".
- [6]. Plank, B., Søgaard, A., & Goldberg, Y. (2016). "Multilingual part-of-speech tagging with bidirectional long short-term memory models and auxiliary loss".
- [7]. Jurafsky, D., & Martin, J. H. (2009). "Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition".
- [8]. Klein, D., & Manning, C. D. (2003). "Accurate unlexicalized parsing. In Proceedings of the 41st Annual Meeting of the Association for Computational Linguistics".
- [9]. Lample, G., Ballesteros, M., Subramanian, S., Kawakami, K., & Dyer, C. (2016). "Neural architectures for named entity recognition".
- [10]. Li, F., & Jagadish, H. V. (2014). "Constructing an interactive natural language interface for relational databases".